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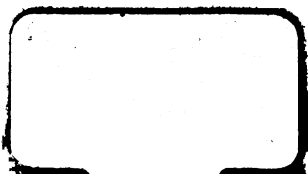
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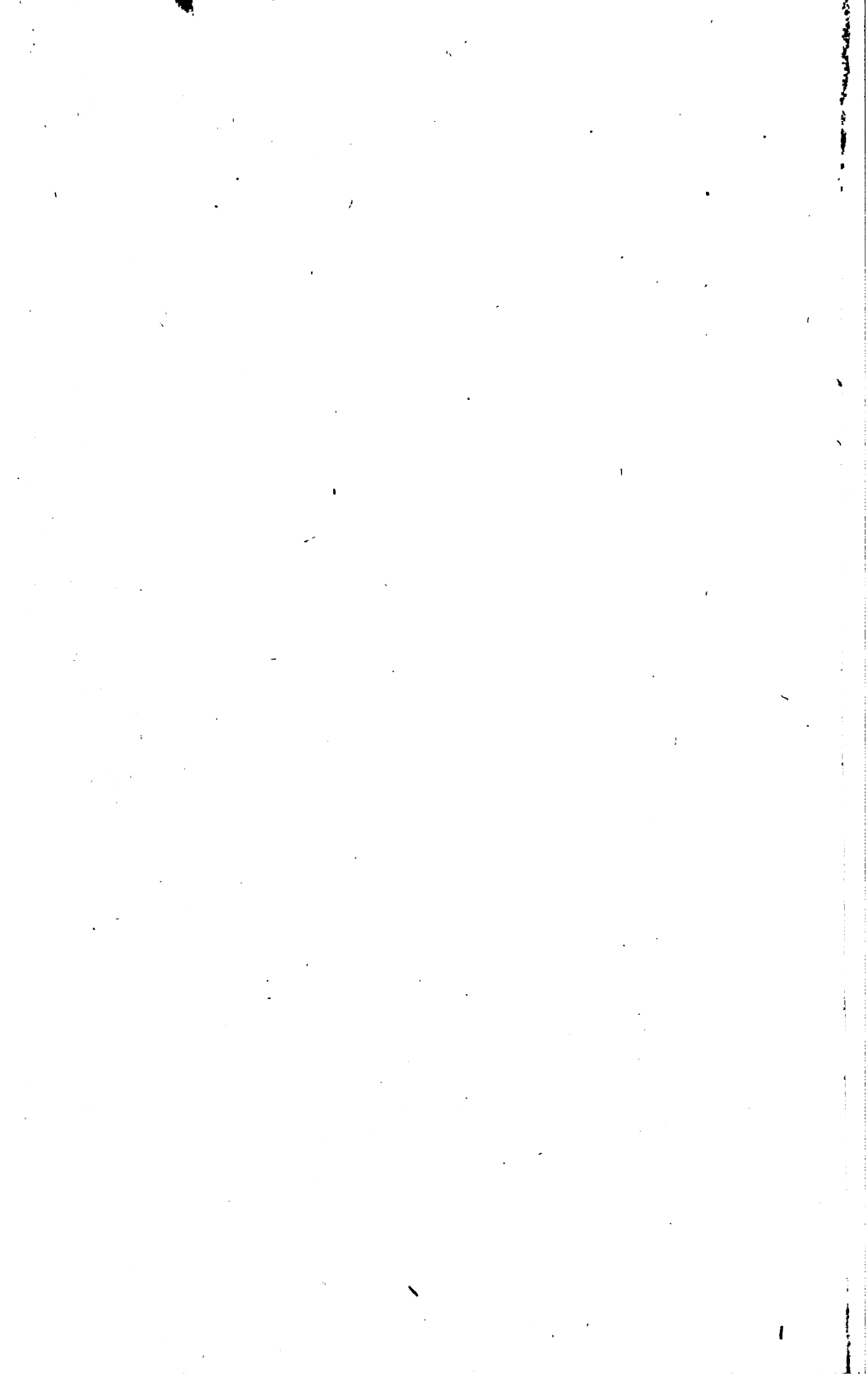
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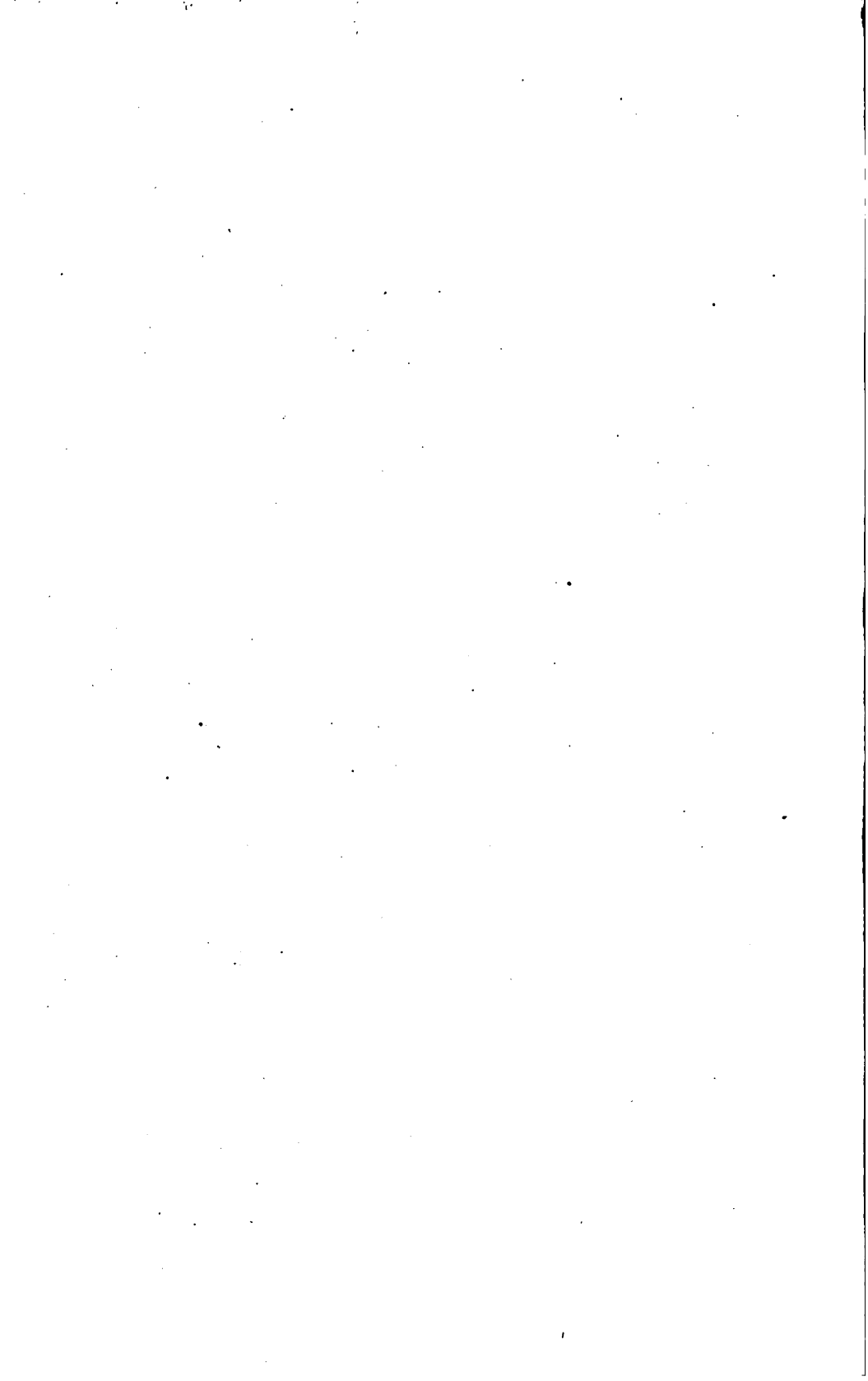


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STATE OF NEW YORK
DEPARTMENT OF HIGHWAYS

PROCEEDINGS

OF THE

NINTH SEMI-ANNUAL CONFERENCE

OF THE

STATE COMMISSION

AND

County Superintendents of Highways of
the State of New York

UNDER THE AUSPICES OF THE

STATE DEPARTMENT OF HIGHWAYS

AT MALONE, JUNE 26-27, 1913



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**PROCEEDINGS OF THE NINTH SEMI-ANNUAL
CONFERENCE OF THE STATE COMMISSION
AND COUNTY SUPERINTENDENTS OF
HIGHWAYS OF THE STATE
OF NEW YORK.**

Meeting was called to order by Deputy Commissioner Paul Schultze in the Court House at Malone, June 26, 1913, at 10:30 a. m.

Present at the opening of the Convention were Deputy Commissioner Schultze, Advisory Engineer George C. Diehl, Assistant Deputy Commissioner Buck, District Supervisors Chamberlain, Cribb, Getman, Gick, Gyer, Mason, McGuire, Perry, Reed, Van Arsdale and Fifty County Superintendents.

In a short introductory speech Deputy Commissioner Schultze introduced Mayor George S. Howard of Malone who welcomed the delegates to the city. Mayor Howard spoke briefly giving the members of the Convention a most cordial welcome and saying in part that Malone took great pleasure in entertaining so large and representative a body of men from all parts of the State.

Mr. F. H. Bryant, President of the Malone Board of Trade, was next introduced and delivered a brief address of welcome. Following President Bryant, County Superintendent S. A. Howard explained the arrangements for the proposed tours of inspection during the conference, stating that the first trip would be made in the afternoon, starting from the Court House at 1:30, covering about sixty miles and taking in the principal points of interest in the northwest part of the county. Mr. Howard stated that the trip on the 27th was from Malone to Saranac Lake and return, going by the easterly road and returning by the westerly.

Mr. Schultze: I have been asked by a number if Mr. Carlisle is coming to the Convention. Mr. Carlisle attended the exercises at Watertown last night, when his daughter was graduated, and he told me that he would be here to-day. Just when he will arrive I can't say.

I want to say that once a county superintendent, always a county superintendent. I think you all remember when I was county superintendent so cut that "Boss" out. I am a county superintendent just like the rest of you. (Laughter and Applause.) As we expect the Commissioner some time to-day I will adjourn this meeting and call the Convention together at eight o'clock to-night for further deliberations. Meeting is adjourned.

At 1:30 o'clock the automobiles forming the line for the inspection tour assembled at the Court House and the start was made a few minutes later, sixty-seven cars being in line. The tour followed a route previously laid out by County Superintendent Howard, frequent stops being made for inspection of the particularly interesting classes of work, fifty-four points of interest being indicated by number with a descriptive pamphlet furnished to each delegate explaining the points of each.

EVENING MEETING, 8 P. M.

Mr. Schultze.—The meeting will come to order. I take great pleasure in presenting the Hon. John N. Carlisle, Commissioner of Highways. (Applause.)

Mr. Carlisle: Mr. Chairman, Ladies and Gentlemen.—I have been in this court room many times in my life but have never met this particular portion of the audience. I have always been trying to get hold of a jury here in the jury box and it is somewhat of a novel experience to come here and talk to you practical men in regard to highways. If anybody had told me the first of the year that I was going to be induced into taking the job of State Highway Commissioner I would have told him that he ought to be in the State asylum. Now I think I ought to be in an insane asylum for ever having taken the job.

I am very glad to be with you gentlemen here to-night for I know you are men who have been actively engaged in the work. I want to impress upon you one thing. I have been examining

the law very carefully for if I don't know much about highways I am familiar with legal questions. I don't think that you county superintendents have ever been called upon to properly perform your duties in regard to State highways and from now on I want you to do this work and I know you are perfectly willing to take upon yourselves the duties which the law places upon you relative to looking after the construction of these roads. If I understand the matter correctly, in the past in building a road in your county under the law it was your duty to approve the plans and this was done in a perfunctory manner. If I understand anything about roads, the condition of the roads in this State must depend a good deal upon the territory through which they are to be built and the traffic they are called upon to bear, and those conditions you men are more capable of passing upon than anyone else. I want you in the future if plans come to you for your county to take your time and if anybody tries to hurry you up tell them I told you to take your time about it. Don't pass them over perfunctorily. You have to sign those plans and approve them and put your signature on them as county superintendent. You are just as much to blame as anybody else if that road isn't what it should be. Then, as you all know, when that road is completed it has to be approved and before it can be accepted you have to pass upon it, as to whether it has been built according to the specifications. You ought not to do that in a perfunctory manner. Don't put your signature upon those plans unless you know that that road has been built according to the specifications and that the State has every dollar of material for a dollar spent. You have to put your signature of approval on the final acceptance of any State route in your county before the contractor can get his money. It means, therefore, that you ought to know about the plans and specifications for that road, that you ought to know the road we are going to build there. You have a perfect right to ask the department to send to you the plans and specifications for that road. You ought to have these specifications and know all about the type of road to be built. If you have not seen the plans and specifications how can you tell whether it is right or not when you come to put your signature of approval on them at the time of the final acceptance?

The trouble is we have tried to build too many miles of road. All that I have been able to do practically since I came to

Albany is to examine the contracts, and I have had to stop the building of some of the roads and to radically change the plans of others. That shows that the policy is absolutely wrong. I will guarantee that thirty per cent of the roads under construction have been brought to my notice — people have come to my office on a proposition of either cancelling the construction entirely or making a radical change in the plans, not a slight change but in regard to the type, changing a concrete road to a bituminous road or changing a gravel road into some other type of road, and it means an absolute radical change from beginning to end in the type of road to be constructed. Those things should never happen. I have told my engineers that I won't stand for it in the future. I want them to take pains and time enough to design a road so that it will be the type of road that we need, that should be built. We ought to know when we get those contracts ready to let what kind of a road we are going to build and I am going to see that that is done from now on, and that is why I want you to be careful, to examine these plans and specifications when they come to you for your approval, so that you will understand them thoroughly when you pass upon the final acceptance. We have got to go slow. We have to-day 1,200 miles of road under construction, 325 different contracts scattered from one end of this State to the other, and I don't believe there is in this State to-day an efficiency of fifty per cent to look after those roads. We haven't force organized in the first place in the State of New York of such a character that we can know that we are going to have built in this State the roads for which we are paying, the roads we are entitled to. We have not the force of men to put on these roads, the right kind of men, to oversee the construction. We have got to go slow and I am not going to be hurried by anybody. Of course every man thinks the road in front of his farm is the only road in the State of New York and he can't see why it should not be built to-morrow. Someone has got to put the stop pendulum on.

I have been very fortunate indeed, I think, to get the Governor to let me appoint an Advisory Board. We have on that Board Mr. Harold Parker, head of the State Highway Department of Massachusetts for fifteen years; Colonel Washington, an army engineer, and a very able man, and Mr. Diehl of Buffalo whom you all know and who has occupied the position which you hold for a good many years. We are going over the roads of the State

to see what kind, what type of road to build in the different localities. We want a road not too expensive perhaps in one locality but sufficient to carry the traffic it is going to have to bear. I am not going to let anyone hurry me through, trying to get out a lot of plans and specifications. Not until we decide upon the different types of roads for the various localities will any contracts be let.

In this State a number of the villages and cities of the third class have raised money to build connecting links through those cities and villages. The money is already on deposit and we hope to take up these matters and complete the plans for those short pieces this summer, but to show you how far we have been able to go — some two weeks ago I asked for a list of the plans and specifications of these roads. A week went by and I could not get anything. Finally they said there are sixty of these short pieces and they are all ready. I had them brought in and we went through them. Out of the sixty there were just three in any proper shape whatever, so far as the records of our office were concerned, to be let. Only three where the records were complete and there wasn't a single one of those three roads where we thought the type of construction good enough to build. There has not been a force strong enough to get into that office at Albany the data and details and the legal forms whereby we could go to work. I am also in hopes that possibly we may be able to build a few small connecting links to connect some of the State and county roads already built. If we can get at it speedily those can be built this year. As to the future, we are not going to let any important contracts in the State or county until we have looked the thing over and have plans and specifications prepared which we feel are right and we hope by fall we will be able to solve the problem and find out just what we are able to do.

We have five million dollars appropriated for the roads next year, three millions for State and two millions for county roads and to make that go over the State of New York is pretty thin spreading. I am going to see that every county in the State gets its fair and equitable share of that money. As soon as we can determine what that fair proportion is and then determine what type of road ought to be built, we are going into your counties and determine which are the most important roads in that section to be built. You can appreciate that with only five millions appropriated for next year out of the fifty million, you can't build

a large percentage of the routes already laid out. The referendum of fifty million provided that this money must be divided among the counties according to area, population and mileage. According to the tables which we have prepared, on a basis of \$13,000 per mile there won't be enough money to build all the county and all the State roads in each county. There are thirty-four counties in the State where there will be a deficit of money to build the State roads and there is going to be a great big shortage in the counties if the county highways are built at an average cost of \$13,000 per mile. You can't build these county highways, as everybody wants them, and maintain them as expensively as the State routes. We ought to cut down this general average cost of county highways a good deal less than \$13,000 a mile. A good many of the county highways can be built for a lot less money than that, they ought to be built and they can be built for less money. Taking into consideration their traffic conditions if you can bring that cost down it means we are going to have so much more money available to build more roads in your county, and it may be possible that we shall have enough money to properly build your county highways instead of having a shortage.

Maintenance is the worst problem I have had to face. You all know as I do the attempt which was made to have this department a political feature. The Legislature recognized that fact and they abolished the Bureau of Maintenance. That meant the reorganization of that department from top to bottom. It meant that under the Civil Service Law I could not put anybody in there unless I took them from the civil service list. I have had to take men from the construction force and put them in charge of maintenance. I am also bound by the fact that I cannot let a contract for over a thousand dollars without a public letting. That meant that if we tried to get out plans and specifications for these roads in order to advertise for bids it would have taken twice the force which we have. We tried to get the Comptroller to make a ruling in this matter and he ruled against us and tried to inject a little bit of politics into the matter and if there hadn't been all this talk about direct primaries we would not have had so much trouble. Now we have to get out the specifications, advertise three weeks in the papers before we can let these contracts. We can't do much but patch work until these contracts are let and I don't see how it is possible to get

these resurfacing contracts in shape so that the men can go to work until the first or middle of August. That means that some roads will be first and others must be last. We are going to try and solve that problem as fast as we can, and I think we have figured out a complete reorganization of that department which I think is going to work all right.

The law says we can increase the number of divisions from six to nine. On the second day of July there is to be a public hearing in Albany in regard to the division of the State. An examination has been called for the 26th day of July for division engineers and also for the balance of the force which we need in connection with the work. That force outside of division engineers consists of nine superintendents of construction, nine superintendents of maintenance, foremen of construction and a chief of maintenance and a chief of construction. These are all under civil service and whoever wishes to take the examinations will have to apply for application blanks. There are no longer foremen of laborers. All foremen of construction in the future must be residents of the county in which they are appointed, they won't be thrown into the general civil service list of the whole State. This means that men from New York City and men from Brooklyn who don't know anything about the locality can't be thrust upon you from the outside but your own people, in your own territory, will be entrusted with the supervision of these roads. We hope by the first or the middle of August, at the latest, to be able to reorganize the department into nine divisions, to have a practical working force, enough men to supervise construction and sufficient men for the maintenance work. If we can organize a State department upon the right basis, where it will be a working department pure and simple, organized for no other purpose than to get a dollar of value for every dollar spent, if we are able to get that force organized by fall we are going to be very lucky. You gentlemen can appreciate that can't be done in a minute, or a month or even two months. The only hope I have is that by fall we will be able to have a working force in this State so that next spring we shall have a force organized which we know will be able to put these roads in proper shape.

Whenever any of you men have any trouble in your locality I want you to be perfectly free to come to me. There is nothing in this for me except to do good work and make a reputation. I can't do it unless the men in my department help me to do it.

The department is going to be run absolutely as a business proposition, no politics are to enter into it. When contracts are made they are going to be lived up to and there is no power on earth that could stop me from seeing it done. There is no power on earth that can stop me from getting the best men in the State for this work. If we can't run a department in this State which is spending the amount of money which our department is called upon to spend, sixty-seven million dollars, so that we can give the people of this State a straight, square administration, we might as well throw up our hands and give it up. I ask you gentlemen here if anything happens in your locality that is not going right don't be afraid to come down to Albany and tell me about it. I want to know it. I believe in a square deal. I believe in making the men live up to their specifications. I believe they should get their money from us without waiting for it, that we should treat them as fairly as they do us. If there is anything that goes wrong in regard to the maintenance or construction in your county, I will treat whatever you tell me that way with absolute confidence. I want your co-operation and I know that with your co-operation we can make this department a success. (Applause.)

Mr. Schultze.—I take great pleasure in presenting the Hon. Edgar C. Newell.

Mr. Newell: Mr. Chairman, Ladies and Gentlemen.—I am glad indeed to see the ladies here this evening although the weather is rather inclement. I hardly expected to have spoken but I do want to say that here in Northern New York we know Mr. Carlisle. I have myself been greatly interested in what he has said this evening. I wish he had talked to us for an hour. He would have had something of interest to tell us every moment. His Commission is going slow. They are going to be thorough. They are going to know what they are going to do and then like David when they are right they are going ahead. I want to assure you gentlemen from all over New York State that we in Northern New York know Mr. Carlisle and know that under his Commission the roads will be built without graft, will be built squarely and I can say positively will be built honestly. That is the kind of a man Chairman Carlisle is. I hardly know how to speak to these county superintendents especially for I am not posted on road work and so I might more properly under the

circumstances speak to the citizens of Malone. Now it is a well-known fact that Malone is great in its hospitality. I have been here attending various conventions at different times and I am pleased to attend this convention of county superintendents. While Malone has always done herself proud yet at the same time I think in the automobile ride she, through her citizens and friends here this afternoon, has in one sense outdone herself. I certainly have enjoyed myself. In Mr. Miller's car, a resident of Malone, his son acting as chauffeur, we made the 60.8 miles in practically three hours. That is the best indication of the general character of the roads that there are in Franklin county to-day, and more particularly the county roads. We went first down to Burke, from there over to Constable and in going over there my attention was drawn to this thing, Mr. Commissioner. A road, the macadam portion 12 feet wide, 7 inches thick and 22 feet from gutter to gutter, a road just as smooth as this floor, properly rolled, was built for not exceeding \$2,000 per mile. We then went over other roads and a friend in the auto was looking over the numbers 28, 29, 30 and so on until we came to 33, "Have a drink on Sam Howard." And when we came to No. 33, where we were invited to have a drink by Mr. Howard we found a spring of water, God's own water placed there for man and beast, something there that would satisfy without injuring—that would not intoxicate. Wherever you can, Mr. County Superintendent, if you have a running stream place a water tank there of some kind and more particularly for the horse and you will certainly be doing a fine work for humanity.

We rode on to Bangor and up over a road part of which is a State road and part a county road and in my judgment, Mr. Commissioner, while not as wide the county road was just as well built as the State road which is being constructed on beyond. We then drove through the village of Moira and so on to the State road in to Malone, 60.8 miles and a very pleasant ride. In my judgment the money spent by the citizens of Franklin county for county roads has been spent well. Just one more thing and I am done. While you have built roads in Franklin county, I am referring now to the county roads as well as the State roads already built, you lack one thing and that is the thing the Commissioner spoke of, these connecting links. You need one here the same as we do in Ogdensburg, from Plattsburg to Malone, from Montreal by way of Valleyfield to Malone, from here to Ogdens-

burg and from Ogdensburg to Watertown and then from Watertown a little over sixty miles to Syracuse and thence to Buffalo. This will give us a through trunk route from Montreal via Watertown, Syracuse and Buffalo. The result will be that numerous travelers and tourists from other states will come through this section. People coming to Malone will find that they have an admirable system of county roads running from Saranac Lake, Paul Smith's and in fact generally throughout Franklin county. The result will be that instead of continuing on they will take a trip over the various county roads, returning to Malone the same night. They can pick up the Malone Evening Telegram containing the Associated Press news and there get the latest news, go to sleep in the hotel at Malone and have the satisfaction of knowing that Franklin county in its roads at least is right up to date.

Mr. Schultze.—I was very pleased to have heard Commissioner Carlisle ask you county superintendents for help in his work. I want to go a little further if I may be permitted. I would like to appoint the county superintendents as my advisory board. As an ex-county superintendent I know the assistance they can be to the Town Highway Bureau. In order that we may get at this in a more concrete form I would like to suggest that the county superintendents appoint an executive committee, say five or seven members, and work through that executive committee with me so that I may make the Town Highway Bureau a success. If I may properly do so I would suggest that one of your gentlemen pass such a resolution or entertain it later on.

County Superintendent Wilson.—Mr. Chairman, I would suggest that the chairman of this meeting appoint his own committee of seven to act as his advisory committee.

Motion seconded and carried.

Mr. Schultze.—I have one more matter to take up and that is the matter of maps. As you all know for some time the Bureau of Town Highways has been preparing maps of your counties. A great many of the counties are complete. I took this matter up with Commissioner Carlisle and he would like these maps the completed ones sent to each one of the counties

and let those who have not the maps get them up themselves. The map is a help between the county superintendent and his town superintendents. They are very valuable as far as the counties are concerned but just how valuable they are to the Town Highway Bureau is a question. I don't believe they are of any value. When I was county engineer of Oneida county I got up a set of these maps. I found them very valuable. Present each town superintendent with as many as he wants. Ask him to keep his record on it, send them to the office and then transfer it to the map on the wall. County Superintendent O'Brien of Oneida county is very willing to send a sample copy of this map to each one of you county superintendents and I think you will find them very valuable. It is not a difficult thing to get them up and with the assistance you will get from the map I will send from the Albany office I believe it will be very little trouble to get a complete set for your own county.

I will call on County Superintendent Howard to speak.

Mr. Howard.—To-morrow morning at eight o'clock sharp, if it does not rain, we will endeavor to make another trip. I understand they had a cloud burst this afternoon over some of the route we are going and so we may find the ditches in the middle of the road and the middle of the road in the ditches. If it rains all night we have several sections under construction through the west and it would be practically impossible to put a trip of this kind through. If it is fair in the morning and not too muddy we shall start at eight o'clock sharp. It is a long run and while I don't want to urge some of you to go to bed early to-night, I do want each of you to get up early in the morning.

Mr. Schultze.—I will appoint on the Executive Committee, Messrs. George C. Diehl, Arthur O'Brien, A. O. Smith, Walter Wilson, O. C. Richards, S. R. Lewis and C. H. Smith. Is there anything else to come before the meeting?

Mr. A. O. Smith.—Mr. Chairman, it was my great pleasure to ride this afternoon with the sheriff of Franklin county. I don't know whether it was by accident or whether Brother Howard put me there intentionally. However, I enjoyed the afternoon very much as did the others with me and in view of

the fact that this is the last time we shall get together here I would make a motion that the county superintendents and their friends extend to County Superintendent Howard and to the Board of Trade of Malone their most sincere vote of thanks for the entertainment we have enjoyed here.

Motion carried unanimously. Convention adjourned.

The county superintendents assembled at the Court House at 8 o'clock Friday morning, the start being made about 8:30, sixty-seven cars being in line. Eighty points of interest had been placarded on this route and frequent stops were made for inspection.



STATE OF NEW YORK
DEPARTMENT OF HIGHWAYS

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UNDER THE AUSPICES OF THE

STATE DEPARTMENT OF HIGHWAYS

AT ALBANY, FEBRUARY 3-4, 1914



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**PROCEEDINGS OF THE TENTH SEMI-ANNUAL
CONFERENCE OF THE STATE COMMISSION
AND COUNTY SUPERINTENDENTS OF
HIGHWAYS OF THE STATE OF
NEW YORK.**

Meeting called to order by Deputy Commissioner Walter F. Willson in the Hearing Room of the State Highway Commission, February 3, 1914, at 10:30 A. M.

Mr. WILLSON.— *Gentlemen of the Conference:* I believe that this is the Tenth Semi-Annual Conference of County Superintendents and I assure you that I consider it a great pleasure to be permitted to call this convention to order and to be permitted to preside over the deliberations of such a distinguished body of men. Your committee, appointed at the Malone Conference, has arranged a program for this meeting, and I am sure that the subjects to be discussed will be interesting and instructive to all.

I thought that perhaps before taking up the regular order of the Conference, as planned by your committee, that you might be interested in knowing what has been done throughout the State in the past year in the way of permanent improvements to town highways, and I therefore beg your indulgence for a short time that I may be able to present to you some of the things that have been accomplished during the past year, as taken from the reports of the county superintendents, which show the following:

During the past year there have been constructed by the towns 464 miles of macadam highways, ranging in cost from \$1,200 to \$3,000 per mile; the difference in cost being brought about by local conditions, such as availability of material, donation of material or labor, more generally depending upon the personality of the town superintendent performing the work.

There have also been constructed during the year, 365 miles of

gravel roads at a cost ranging from \$800 to \$1,500 per mile; the variation in cost is subject to the same differences as cover the cost of the macadam roads before referred to.

Reports also show there have been constructed 13,381 permanent culverts, which is a step in the right direction, as I do not believe there is anything in road construction that is of more permanent and lasting benefit to the public at large than this class of work.

During the year just closed, 968 concrete bridges have been built by the town superintendents, 1,023 steel and concrete bridges have been built, making a total of 1,991. This is, taking all things into consideration, I think, a very creditable showing for the year.

The efforts of this Bureau this year have been directed more than ever to the securing of more lasting and permanent improvements than has generally been undertaken, and I believe that more attention should be given to this matter in the future, and it is the duty of you county superintendents to use your best efforts to see that a liberal amount of highway money is set aside in the agreements made between the town board and the town superintendent for permanent improvements.

I believe that if you will give this matter your attention, the results accomplished will be very gratifying to all.

The highway tax for 1914 shows an increase from that of last year of \$273,000, including State aid, and 321 towns will receive the maximum amount of State aid in 1914, an increase of 74 towns. This shows that when the people voluntarily increase their highway tax that the people as a whole are satisfied with the system and willing to furnish the money for highway improvement, and it is up to us to produce the results.

I wish to take this opportunity to express my thanks and appreciation to you county superintendents for your efforts and I give you credit for the splendid results. We will now proceed to take up the regular order of the meeting as laid out by your committee. (Applause.)

The first subject to be taken up is convict labor on county roads by Mr. Frank E. Bogardus, county superintendent of Onondaga county.

Mr. BOGARDUS.—The county of Onondaga has maintained a penitentiary for upwards of sixty years, and during the last fifteen years there has been confined in said institution, on an average, about three hundred men. This institution, prior to the year 1901, was located within the limits of the city of Syracuse.

The employment of the prisoners in the old institution was provided for through contracting their services in the manufacture of brooms, bolts, etc., which was permitted under the laws governing the management of penal institutions at that time. After the amendment of the laws governing penitentiary management whereby the contract system was eliminated, the county authorities were deprived of substantially all means of employing the prisoners to advantage, and were compelled to seek a new plan of employment, with a result that the institution was moved out of the city to a limestone region, a distance of about six miles from the former location. Since the establishment of the new institution male prisoners not employed in the care of the farms and institution matters have been used in the quarries situated upon the penitentiary farm with a view to furnishing the municipalities of the county with crushed stone material for road building purposes, there being about two hundred men available for this work.

During the first ten years, up to 1910, but little advantage was gained through the use of the penitentiary forces in the quarry, due to the fact that the system remained undeveloped. At this time there was also an objection from the State Prison Commission to the plan of operations on account of the men not being worked during the winter season.

In the meantime the demand for the improvement of highways within the county had increased to a point where the amount of improvement provided through the operation of the State Highway Department was insufficient to meet the expectations of the people of the county. The average amount per year brought to the county, through the regular improvement, under the State Department, having been but eleven miles. The situation thus developed, naturally directed the attention of the county authorities to the question of the employment of the idle forces at the county penitentiary.

In the year 1909, the first attempt was made to employ the

prisoners outside the institution premises. Two sections of road located near the institution were being improved by the town authorities; and the superintendent of the penitentiary, largely because of the reason that the supplies for the institution were taken over one of these sections involved, consented to join forces with the town superintendent in the repair of the town roads. Something like twenty to thirty prisoners were detailed for this work under the direction of one keeper, and occasionally an additional keeper.

The improvement consisted of heavy work, whereby a steep grade of about 15 per cent was reduced to a 11 per cent grade to permit the placing of waterbound macadam, and upon another section the natural grading and shaping work was performed to facilitate the laying of waterbound macadam for a distance of 3,000 feet.

No charge was made for the services of the penitentiary forces, and the only conclusion reached with reference to the case was that the town was relieved of at least 50 per cent of the natural expense of the improvement of said section of road. In this case the prisoners were housed at the institution and there was no expense of transporting them to and from the work. The town men were in charge of the work, and the plan of work was laid down by the highway department. The men from the penitentiary were working side by side with the common laborers employed by the town superintendent and everything moved off satisfactorily.

No further attempt was made for a couple of years to use these men outside of the institution because it was thought to be impracticable to guard and house them in temporary quarters at a distance from the penitentiary control. The quarry was worked in the meantime with indifferent results, there being a lack of consistent management and improved machinery with which to perform the work. The revenue from the output was of no account as compared with the cost of production.

In the year 1911 a sentiment arose with the members of the board of supervisors favorable to a further experiment in the use of the penitentiary forces for highway work, and on August 7th resolutions were adopted outlining a plan for the employment of the penitentiary forces for the improvement of a town highway

situated about five miles west of Syracuse. The results attained can best be shown by quoting in part the report of the supervisors' committee, who had this work in charge:

"On the 23d day of August, in pursuance of the resolution of this Board, adopted August 7, 1911, Mr. Markell, Superintendent of the Penitentiary, moved thirty-six prisoners from the penitentiary to an old house at Amboy, N. Y., which had been previously renovated and repaired by the prisoners under his direction; and on Thursday morning, August 24, about thirty of the said prisoners started to construct the road leading from Amboy to Warner, said work being laid out under the direction of the county superintendents of highways, and said prisoners having been employed on said work each day when the weather permitted, being a total of eight days, and have a large stretch of road rough graded, some sluice work done and ready to lay stone, and the committee believes that said prisoners under the able management have accomplished more in the short time they have been employed than was expected.

The committee further desires to report that said prisoners have shown a disposition to perform faithful service, and the committee believes they have accomplished as much as would have been accomplished by paid laborers.

The superintendent of the penitentiary handled the prisoners with such tact and discipline as to not only force honest employment from them, but also to interest them and command their respect and co-operation to such an extent that no trouble has been experienced up to date, and this, too, in view of the fact that the keepers of said prisoners have in no way exhibited arms of any kind and without the use of chains or shackles of any kind.

The committee is very much pleased with the progress of the work, and believes that it will be shown, when the work is completed, that much saving can be made to the county and its taxpayers."

Because of the late start an insufficient amount of work was performed from which to make any reliable deductions with reference to the cost of the work, but the experiment had proven beyond a doubt to the board of supervisors the practicability of the use of penitentiary forces for highway work, and further authorization

was made for the continuance of the work during the following year.

To expedite the plan of work for the 1912 season, portable camp buildings were erected at a cost of about \$1,500 and these buildings afforded most excellent shelter for the men at all times. The buildings were built in panel form and arranged to bolt together in almost any length, or to be set up in separate units according to the lay of the ground selected for a camp site.

An outfit consisting of a road roller, dumping wagons, sprinkling wagons, pipe line, pumping engines, etc., was procured at the commencement of the season's work. The county superintendent of highways was vested with the supervision and control of the work at this time.

The work was started on the Amboy-Warner road May 7, 1912, with forty-two men available for work outside the camp. The working period extended from May 7th to November 23d inclusive, during which the work was prosecuted comprised 168 working days. The prisoners did not work upon eighteen days because of weather conditions, and four days of holiday time. The number of men available for work outside of the camp during the whole period, that is, six months, was 50.48 per day.

Five, and sometimes six keepers were detailed from the penitentiary staff to guard the men and supervise the work, and one keeper was detailed to take charge of the camp during the working period. Three guards were employed to guard the camp at night, making a total of ten keepers upon the job. The county highway department furnished a superintendent, time keeper, rollerman and a general helper, making a total of fourteen men involved in the guarding and supervision, the services of which became a fixed charge for the season.

The plan of work adopted consisted of grading, draining and laying standard waterbound macadam, together with the construction of sluices, railings and other necessary work to establish a class of work similar to that of the State plan, with the exception that the cross section runs to less width of macadam and shoulders than that usually adopted by the State authorities. The macadam section was nine feet wide, laid in two courses five inches loose measurement bottom, and four inches loose on top course, with

shoulders 5½ feet wide, making a total width of roadbed of 20 feet.

The amount of stone material used was a considerable excess of that required for the above mentioned depths, which feature of the work tends to show that a thoroughly permanent improvement was laid down. The work extended over a distance of four miles, and the expenditures were as follows:

Supervision	\$1,527 24
Skilled laborers	1,093 70
Team work	6,167 87
Allowance for penitentiary labor at 7½ cents per hour	4,426 12
Supplies	1,415 21
Crushed stone	\$2,868 74
Freight on stone	4,516 02
Demurrage	127 00
	<hr/>
	7,511 76
Deterioration of 15 per cent. on equipment valued at \$5,500	825
	<hr/>
Total	\$22,966 90

or an average equal cost per mile of \$5,741.72.

The crushed stone used upon the job was furnished by the use of the penitentiary forces working at the county quarry and said material had to be shipped over two lines of railroad, with a fixed freight charge per ton of 50 cents and the amount of material is valued in the above statement at 35 cents per ton, which is 20 cents less than the regular market price.

The facilities of the county quarry had been increased during the winter of 1912 and 1913 by the installation of a railroad switch, up-to-date gyratory crushers and quarry cars, narrow gauge track, electrical power, motors and other equipment to establish a complete up-to-date plant, the value of which is approximately \$50,000.. This equipment was installed as a county expense. The output became available upon the penitentiary road jobs, also upon county road work, and town road work generally.

At the end of the season the report of the superintendent of the

penitentiary concerning the road work and that of the superintendent of highways was referred to a special committee of the board of supervisors, which committee reported among other things as follows:

“Through the system of letting the work of improvement of county roads, which system has been in use for the past two seasons, we find that the average under conditions similar to those on the penitentiary road job to have been between \$6,006 and \$6,303 in the respective instances. It is therefore apparent that employment of the penitentiary prisoners upon road work has not resulted in an excessive or unreasonable outlay. In so far as the financial side of the proposition is concerned, it is but fair to admit that no gain has resulted. But, your committee believes that future undertakings of this character can be made more profitable. The experience gained through last season’s experiment by the heads of the departments and all others down through the organization forces, will materially insure more consistent and economical management, which with the employment of a larger working force (not less than 75 men) with substantially no greater overhead charges will lessen the cost 10 per cent.

Legislation to permit a nine hour working day instead of eight hours, as prescribed at present, would lessen the cost another 10 per cent for same reason, i. e., fixed charges would not be increased.

In order to ascertain the advisability of drawing upon the available working forces of the penitentiary for at least 75 men for the road, careful inquiry was made concerning the number needed to work the farms and operate the quarry. It was found, through a conference with the superintendent of quarries, that the services of a considerable number not heretofore used to the best advantage, will become available. By reason of the installation of an up-to-date crushing plant and the improved shipping facilities, in the opinion of the superintendent 75 men could be detailed for outside road work without diminishing the quarry output.

More important and interesting features than those presented in the financial side have come to the attention of your committee. The records of the penitentiary show a decrease of population during the last year or two and with a view to ascertaining whether such decrease has any bearing upon the matter of regular employ-

ment of the prisoners in the quarry or upon highway work, a request was made by the superintendent to the superintendents of three penitentiaries of the State to furnish data concerning the number of prisoners confined at these institutions on January 1, 1912-1913. The result showed a percentage of increase in population from the years 1911 to 1913 as follows:

Erie county, 25 1/10 per cent.

Monroe county, 12 1/10 per cent.

Albany county, insufficient data received.

The number confined at Onondaga county penitentiary January 1, 1912, 460; January 1, 1913, 356, percentage of decrease 22 6/10.

Your committee is inclined to believe that an indirect saving of dollars is indicated by the above figures.

It is conceded by those who have made a study of the question of the employment of prison labor that the use of said labor in quarry and road work conflicts with free labor in a lesser degree than most any other line of employment.

The State Prison authorities have not only approved of the use of the prisoners for highway work, but heartily recommend such employment, and further, the authorities of other counties are becoming interested to the extent of ascertaining the details of the plan of using prisoners upon highways and have expressed a willingness to send prisoners from their county penitentiary provided they might be assured that said prisoners could be regularly employed at the quarry or upon road work.

Some mention should be made in this report of the behavior of the prisoners detailed for this outside work. It appeared to be an easy matter to maintain discipline in the camp and upon the job outside. The prisoners were given to understand that unless directions were observed and a reasonable amount of service rendered, the stone quarry awaited them back at the penitentiary as a penalty for such disobedience or delinquency. The men were contented and orderly in camp.

The improved section of road extended through a section of thickly settled farming country, and directly in front of at least three schoolhouses, and the effect of the prisoners presence upon the community after the first day or two was similar to that of

any ordinary workmen engaged in such kind of work. No ungentlemanly conduct was reported nor any complaint made concerning the conduct of the prisoners during the whole six and a half months that they were in camp.

It was evident that the outside work agreed with the men, as an increase was shown in their weight, and general appearance was improved.

There was one escape and two attempts at escape. Of the prisoners escaping, one was brought back to camp by a farmer in a short time after his disappearance, and another was absent for a couple of days, but voluntarily presented himself at the camp and was permitted to assume his duties at his labor upon the road.

RECOMMENDATIONS.

1. It is recommended that the plan of working the prisoners for highway improvements be continued upon a larger scale another year, in substantially the same manner as that previously outlined by your honorable board.

With a view to establish a different line of control of prisoners upon highway work, somewhat along later ideas and of a reform nature, it would appear to your committee that the number of guards might be materially decreased, and the prisoners placed more upon honor, possibly the stripes might be discarded, and used only upon such prisoners as might be guilty of some violation of discipline as a punishment and degradation for such offense.

That the prisoners engaged in quarry work shall be required to perform the full eight hours service in the quarry exclusive of the time consumed in traveling from the institution to the quarry and back, or any other contingency.

We further recommend that, in consideration for a reward for faithful service, the character of the rations served to the prisoners be improved, particularly in the quality of the coffee furnished. It might be well to supplement this phase of the matter through the use of crockery dishes instead of metal as has heretofore been the custom."

Acting upon the recommendations of the committee as set forth in the above report, arrangements were made for the 1913 season's work, and operations begun on April 25 and extended to December

20, 1913, with an average number of men available for work per day of fifty nine. About the same organization for the supervision of the work was carried as in the previous year. Over the greater part of the sections improved the construction was widened; twelve feet of macadam being laid instead of nine, which width was the standard for 1912 work, the shoulders widened to twenty-four feet. This change was thought advisable because of the fact that the sections of highway being improved were located adjacent to shipping centres and with an increased traffic. 1.15 miles of improvement where the nine foot section of macadam was involved was completed, and 3.25 miles with a twelve foot section involved were finished at an average cost per mile of \$7,108.91.

As a result of the 1911-12-13 operations 6.75 miles of improved road were completed in a continuous section, and the improvement of a new line of road was undertaken extending from the opposite direction for a distance of about ten miles, necessitating the moving of the camp and outfit a distance of about fifteen miles. This change of operations was effected with very little trouble or delay. The men being taken back to the institution for a day or two during the time the camp buildings were in transit.

The improvement of the last mentioned section of road was of a different nature than that previously attempted, and involved the change of the location of a stream of considerable size. A new channel being excavated 20 feet in width at the bottom of the slopes and to a depth of from five to seven feet, involving the handling of six to eight thousand yards of stone, which material was placed in an embankment to form a road bed across the flats adjoining the stream. One mile of this road improvement was located over a new location across a low flat section of country. The drainage conditions were peculiar. It was found necessary, as a result of these conditions to excavate side ditches of a depth of five to six feet along certain sections of said mile in order to establish the necessary drainage, because of the unstable condition of the soil constituting the foundation of the roadbed. Greater depths of stone were used in both cases, not less than 12 inches loose stone being placed, and for a part of the distance a third course of stone was placed in the regular manner, making a total depth of crushed stone roadbed of at least sixteen inches loose measurement.

Mr. WILLSON.—Gentlemen: We have with us to-day a gentleman who has very kindly consented to come over here and talk to us a few minutes and I think it is a very good sign for all of us perhaps that the State Prison Commission is getting into road building instead of us county superintendents getting into — well, never mind. (Laughter).

It gives me pleasure to introduce to you Judge Riley, State Superintendent of Prisons.

SUPERINTENDENT RILEY.—Mr. chairman and gentlemen: The chairman suggested that I talk to you about the work being done by prisoners on the highways, the work that has been done during the past season. He thought that would be more interesting than any other topic that I could discuss. I will try to go over the history of that work very briefly. I won't undertake to give you in detail the figures showing the amount of work done and the actual disbursements on account of that work.

The history of the matter I might refer to although I think in doing so I will have to mention myself. Some years ago, in 1906 I think it was, in the fall of 1906, the State Prison Commission whose duties are to find employment for convicts, visited Clinton prison and spent a night at my home city, Plattsburg, and was interviewed by the home newspapers and it appeared that the great difficulty encountered in prison management was in finding employment for the prisoners. Well it occurred to me and I had for some time prior to that suggested that many of these prisoners might be profitably employed in highway construction. I took the matter up with Dr. Howard of Buffalo and tried to convince him that here was a plan that was feasible and might be put into effect. We had considerable correspondence and I was unable to convince the Doctor that the convicts could be so employed. His objection was that the neighbors would not tolerate the presence of the prisoners and that they could not be induced to work; that it would cost too much to guard them, and all sorts of other objections. However, I managed to get the matter before the State Prison Commission in person. I was not able to convince Mr. Collins, then State Superintendent, but he was not unwilling to make an experiment. My own idea was that these men should be employed in the construction of earth roads and while I have been

very much interested in the report of the work done in Onondaga county, I am still convinced that the employment of prisoners is more feasible in the construction of earth roads than in undertaking to build macadam roads. It is all very well if it is possible to have macadam roads, but in our own county we have 1,350 miles of highway and to build macadam roads would cost much more than the assessed valuation of all property in the county of Clinton, so nobody may figure very far to come to the conclusion that the great majority of the highways in the State of New York must in the future still continue to be earth roads. After the hundred million of dollars now appropriated for highways is expended we still have 77,000 miles of earth roads, 90 per cent in fact of all the highways of the State of New York. Now, further than that, I am satisfied that so far as any type of road that the State department has been able to build, except a brick road, that a good gravel road is the best and you can build ordinarily ten miles of it where you can build one of macadam and it makes a better road than your macadam. I know what I am talking about in this construction work, and what led to my thought about building earth roads began away back when as a boy I helped to shovel clay on a sand road which from that time to now has shown the benefit of the work done I won't tell how many years ago. Now a good sand road, properly mixed with clay if it is in the vicinity and you have not gravel, is very durable and easily kept in repair.

Coming back to the construction of earth roads by convict labor, the first road was built in 1911 that I know of, when I succeeded in persuading the superintendent to send out twenty-five men, without guards. They had no equipment; I furnished the house to house the men. The prison authorities were very much surprised to find these men would do as much work as the men to whom you paid \$1.50 or \$2 a day. They were delighted to get out and have the privilege of sleeping in this old farm house. Their behavior was good. That work was continued last year when they built five miles of gravel road, up grade sand. Our friend, Mr. Gick, has been over this road in an automobile. You will all agree that an upgrade sand road is about the worst you can ride over. They rounded it up and prepared for a gravel road. There was a gravel bank somewhere near and they put four

or five inches on and smoothed it out and every automobilist will tell you that it is a better road than the macadam to-day to drive over. That road can be kept in repair year after year by a harrow going over it. One thing people lose sight of is that from May to October, if the road is properly crowned and graded, we don't have any mud. It is only during the time that the frost is going out in the spring or late in the fall a road is likely to cut out.

The Legislature made an appropriation of \$10,000 for equipment and the employment of convicts on highways. As soon as we could, about the middle of July, we got some men out to work. We had five different squads of from twenty to twenty-five men. There was a single overseer and the State paid for the team work. The town shared in the enterprise chiefly by furnishing what road making material they had, also in furnishing the fare to the prisoners. The men were furnished with the ordinary prison fare and the town furnished little extras. Everywhere the worst piece of road was selected, roads which required a good deal of work to put in condition, although we tried to select roads that connect up important sections. One road, a mile and a half long, which had been a highway as long as I can remember but was never used, the farmers going two miles out of their way to get to the city of Plattsburg, was improved. To-day that mile and a half is one of the best roads into town and all that section is saved four miles on the round trip, coming and going to market. Another road that we undertook to shorten was to cut down an impassable hill which shortened the distance from one village to another. This involved some heavy grades. Our county superintendent knows more about it for I think that it was situated in his town. I speak of this to show simply that we tried to do connecting up work along this line:

Of course we had a different class of prisoners; the average citizen would think they were of a very much worse class than our friend, the Onondaga superintendent, had. The men selected for this work are those who in a comparatively short time are to be discharged from State Prison and this employment on the highways develops their muscle and puts them in physical condition so they are able to take care of themselves when they leave the prison, in such condition that they can make good instead of

sending them out with the prison pallor, absolutely unable to do manual labor; giving them a ticket and \$10, and they go out ordinarily with a determination to engage in manual labor and to make good and the results have been, to my mind, full of good. I think there is 25 per cent more men in State prison to-day than there would have been if some policy regarding their discharge had been adopted ten years ago. The average convict must be content to engage in manual labor when he leaves the prison. Unless he has some friends to take care of him in a few days his ten dollars is gone, he can't do manual labor, no one will hire him in a position requiring moral responsibility, and in a few days a man must either beg or steal or starve and the result is that he usually does the easiest thing and when he comes back the second time he is pretty sure to come back the third time. A great many of these men are simply unfortunates who, through the excessive use of liquor, commit a crime. The most of them, especially men of that class, are sent to prison for too long a term and are ruined by their length of service, whereas had they been given proper punishment and allowed to go they would have made good.

There was no appropriation for this highway work made at Auburn. When I first talked with the warden about it he said when the whistle blew at Auburn the people for ten miles around were in terror for that was notice that a prisoner had escaped, and he thought the people would be alarmed if any convicts were sent out to work. He took it up with the county superintendent of that county and they found a place where they could send twenty or twenty-five men and they did such remarkable work, in a short time he had five squads out. Take it up at Wingdale. I have sent twenty-five men out without guards, showing that they can be trusted. I would not spend so much money on guards. I would put it up to the men themselves. They would rather work on the roads than to sleep in those cells.

Mr. BOGARDUS.—(Interrupting.)—They offered to stay all winter with us rather than go back.

Mr. RILEY.—Some of the men that are employed have two or three years to serve. The only escapes were two from Auburn, one came back voluntarily and the other wired that he would be

back in a little while but he has not shown up yet. I don't know that I want to take up your time any further. I hope provision will be made by the Legislature by which two or three hundred men who can be trusted to be put out on road work may be put in a position so that they may be so employed, but I maintain that the greatest value which we receive from the employment of these men on the highways is in its effect on the prisoners themselves. The general effect upon that class of people in employing them in this form of work is, to my mind, exceedingly beneficial and should be carried to its greatest extent. I think that a man should be put out and given a chance to work in the open air before he is discharged.

One other point, we are in a remarkable stage of progress so far as road making is concerned. The only chance that I see anywhere in the future to do work that will be most beneficial to the larger number of people in the State of New York is to make an effort to improve the roads that must continue to be earth roads. The labor required to improve the ordinary country earth road would mean the employment of a very large number of men. Many of the old earth roads must be almost rebuilt. They were built for stage coaches, now the automobile has come. They are too narrow, they must be widened out and the style of construction was not of the best. Automobilists as a rule who have traveled over the maccadam roads in the condition in which they are found generally, are very glad to come to a few miles of good earth road. Gentlemen, I am afraid I have already taken up too much of your time. I thank you for your attention. (Applause.)

Mr. WILLSON.—Mr. J. C. Dayton, County Superintendent of Cayuga County, has a little something to say on the results of convict labor on town highways. We will be glad to hear from Mr. Dayton. (Applause.)

Mr. DAYTON.—*Mr Chairman and Gentlemen.*—I am always a little suspicious when the applause comes beforehand. Maybe after I get through you won't feel so much like it. It is my fortune or misfortune to hail from a city whose reputation is such that when I give the name of my residence the first question that arises on the lips of the stranger is, What was the number of your cell?

Auburn has some other reasons for fame but the State prison with its population of thirteen or fourteen hundred is one of the industries of Auburn.

Auburn is a second termers prison. That doesn't mean that all the prisoners within its bounds are second termers, for firsts, seconds or thirds alike are sent to Auburn from the western and central part of the State, but it does seem that when Sing Sing gets overcrowded a batch of second termers are sent on to Auburn to relieve the congestion and when Auburn gets overfull a batch of third termers are sent on to Dannemora, and that of the ball and stripes on the prisoners' arms to indicate their term, the white for the first term, the blue for second and the red for third, the blue predominates in Auburn. It is pitiful to see how many of these blue stripe men are so young, less than twenty-five, often less than twenty-one. A sentence to the Elmira Reformatory counts for one term and many of the prisoners are graduates of Elmira. As a reformatory the history of the inmates of Auburn prison would indicate that Elmira doesn't reform, not so that it can be noticed.

But to get back to its application on our road work. I heard my friend Mace in these gatherings tell of the prison labor used in Clinton county, and my friend Bogardus tell of the road work by the penitentiary inmates in Onondaga, and while it grated on me that Cayuga county sent its county prisoners, its penitentiary men to Onondaga and paid their board while Onondaga worked their roads with them, I could not see my way clear to bring about a change.

I called on the former warden of the State prison, with whom I had a speaking acquaintance, and tried to arrange for the prisoners working on the roads, but without result. Then last summer there was a change in the superintendent of prisons and our local warden and I found a change in the attitude of the prison authorities towards road work by convicts. I found the warden ready and willing to give the road game a trial. The first intimation did not come to me direct. I learned from one of my town superintendents that he had received an offer of convicts for road work but was doubtful of taking it up. I went immediately to the warden and I found him willing and anxious to co-operate in giving prison labor a tryout. It wasn't the town that had been

talking first that got the first gang. The town of Ledyard was building a five-foot culvert with a forty foot retaining wall. Photos of the completed work are numbers 1 and 2, and were in shape to utilize the men at once, and it was but a few days before they were at work there. On the 22d day of July I took my town superintendent of Ledyard to the prison and a plan for the care of the convicts was arranged. The town had to furnish a house for their housing, milk and butter to supplement the prison fare, gloves for handling the rough stone with soft hands, some tobacco and on the 25th with the help of some autos from the Automobile Club of Auburn, volunteered, and my own Ford, we moved sixteen convicts and a guard to Ledyard.

The talk of the warden to the convicts when they lined up preparatory to the start is illuminating: "All you men have asked to go out on this road work. Do you still want to go? You will have more liberty than you have had inside. We expect you to give a fair day's work in exchange. If any of you want to run away, try it. I'll get you. You are still under prison rules and any attempt to escape will forfeit your short time." These men were soft. I never saw a gang more willing to work nor one more awkward. Although I have handled men for thirty years I don't recall ever telling them before to take it easy; don't kill yourself. Even in swinging a pick and wielding a shovel there is a certain amount of skill which these men in nearly all cases had to learn. There was a man in this lot who was finishing up a fifteen year "bit," others who had not been out in the open for years. They were all men whose terms were drawing to a close and indeed before ten weeks had passed all of these men had been returned to the prison, one and two at a time and discharged, their term having expired and their places filled with others. The plan was instituted as much or even more to help the convicts than it was to get road work done. To give to the convicts so long immersed within prison walls God's fresh air and sunlight, a healthy sunburn instead of the prison pallor, and hardened muscles and a sense of independence that comes from the knowledge that one is fitted to earn their own living and that not everyone's hand is against you. In furtherance of this plan the convicts were taken from those who asked to go and whose terms of punishment had nearly expired.

We had five camps out. A camp consisted of sixteen men and one guard. The guard was rarely ever armed. It was the authority he represented that gave him influence. Several of the men were returned to prison for bad behavior, for insubordination, staying out over hours, for stealing, etc. If they loafed on the work to the point where it needed correction just a word, "You can go back in if you don't want to work" would put that right.

After working hours these men amused themselves, fruit was appreciated, a ball club was instituted in nearly every camp, the men were allowed out and did visit the neighbors where invited around, so long as they were back at varying times in different camps, under different guards, generally eight to nine o'clock. Of the sixteen men, three, the cook, the cookee and the barber stayed at the camp while the others worked. Our chief trouble came from these stay-in-camps.

It cost the towns for milk, butter and extras, house rent, etc., between thirty and fifty cents per day per man. They built the concrete culvert, retaining walls, in photos. (Photographs were exhibited.) My estimates of cost for this (it was extraordinary repairs, a forty-foot washout), was \$650, under the day labor system. It really cost with convict labor \$376.38. This proportion holds good in most of their work. Some more expert labor was employed along with them and of course team labor had to be paid for.

From the standpoint of getting road work done, some that wouldn't have been started without their help, and getting more done than under the paid labor plan, because of convict labor lowered the cost, it paid. From the standpoint of benefit to the convicts themselves, it paid.

Let us take up some of the disadvantages of the system. They only work eight hours per day. Where you have been working or are trying to work teams nine and ten hours and stop your manual laborers at eight hours, you work at some inconvenience. The men wanted to go in for dinner and that often involved an extra team for transportation back and forth and a long nooning. So many changes, men whose time was expiring, men to meet the parole board, new men to go out to fill up the gangs to full force.

men sent in as a punishment, that to keep the system working smooth and harmoniously some one had to look after that transportation. I find on looking over my records that I moved convicts out or in on twenty-nine days between July 25 and October 31, and the prison authorities also made many transfers. Springport was on the railroad and several times men were put on the train and told to report to the prison and they did it. We had four runaways, but they were all from one gang; the others were true to their promises. The prison truck moved nearly all of the provisions and the bedding and cooking utensils. The transportation was somewhat a factor.

Now the benefit first from a road man's point of view: The Ledyard camp stayed out from July 25th to November 26th. In all cases some free labor was worked with the convicts, team, labor and rental of machinery paid for, but the employment of the convicts so reduced the cost of the work that it enabled probably twenty-five to forty per cent more road work to be done.

Camp No. 2 in Springport enabled us to do what we could not have afforded to have undertaken, the elimination of a half circle in the road, involving a twelve hundred yard fill and new location for bridge. We worked a thorough organization on this concrete, giving each man his part. Two on the mixing, two bag batches, one on gravel, two to carry the mixture, one on the boulders, one to place, two men on forms and there was opportunity for rest enough between the different kinds of work so that the men hustled while they did work. A man with the reputation of being the slickest check lifter in the country kept up one end of that mixing board and did it well. After his discharge he went to work for a farmer of the neighborhood, met through this work, and while he had to learn farming he was reported to be giving excellent satisfaction at last report. He is a pleasant appearing, pleasant mannered, very agreeable man to meet and he says he has turned over a new leaf and so far everything indicates that he has done so. Dan Breck, nicknamed Tammany, big, strong and willing, handled the form work. He is also now farming in Springport, since his discharge, and giving satisfaction. A number of men found work after their release through the acquaintance made and the end is not yet. Only last week I had another application for a parole man.

Aided in part by convict labor there was laid in Cayuga county last year about four miles of macadam road. Built five concrete and iron bridges and culverts. Handled four pieces of grading and fill at a cost reduction of from thirty to fifty per cent over what would have been the cost at \$1.75 and \$2.02 for manual labor per day.

As to the benefits to the convicts themselves: They enjoyed the work and they want to go out again. The Warden told me they are like college men trying to make the team. The men in Auburn now are planning and trying to make the road next summer. The prison chaplain stopped me on the street the other day and asked how about the road work next year. "It has been a splendid influence for good for the men." The men themselves told me so before they went in and the last two escapes would not have occurred and they came after they had gathered up the tools the night before they were to go back, if it were not for the dread of the long winter inside.

They tell me you can always get loud applause if when addressing a convict you tell them that there are lots of men out of prison that ought to be in, but most of them are there because they deserve to be there either by inclination or environment they wanted to be. Upon them all the road work was an influence for good. There was Harry Clark from the New York West side, say 24, in for burglary. I brought him in one night from Victory for discharge. The next days he says, "I never did a day's work in my life until I worked around that stone crusher. Working ain't so bad. I am going back to New York and get a job and go to work." I have already told of several that secured jobs with farmers and made good. Jack Service of Watertown got drunk and did a fellow up. He is not a natural criminal, he had my sympathy, with a wife and children and he is still in. He hasn't made parole. Clarence Mackey quarreled with his wife and she left him. After a few years he married another woman and his first wife had him pinched for bigamy. Then on the other side is Fred Rising, time up, discharged, went back to Victory where he had made some friends while working, stayed a week and ran away with a horse and wagon. They got the rig back and let him go. Possibly our Cayuga county folk made too much of him. The neighbors sent

in chicken pies and cakes in nearly every settlement but Cayuga county folk are noted for having warm sympathetic hearts.

I thank you, gentlemen, for your attention. (Applause.)

Mr. WILLSON.—Gentlemen, we have one other paper to be read but as the hour is now twelve o'clock and a little after I think we had better adjourn until 2:30 and I would like you all to be here at 2:30 sharp as Commissioner Carlisle is to come in and speak to us. We will adjourn now.

AFTERNOON MEETING, 2:30 O'CLOCK.

Mr. WILLSON.—The meeting will come to order. The gentleman who is about to address you I don't think needs any introduction. Mr. Carlisle, the Commissioner. (Applause.)

Mr. CARLISLE.—Gentlemen, in these times of stress and trouble I particularly want to say just a few words to you as to our future. Now your money is all apportioned to your different counties and as you understand, of course, that money must be spent in your county on your State and your county highways. Now every county in this State has got to commence to figure out where eventually it is coming out with this second million dollars. You must figure if you have not money enough to construct all your State roads which are the most important State roads to be built and whether we can shift them over into the county highway system to complete them. A good many of your counties are in the same situation as mine, trying to figure out how to build the roads in order to get as many miles of highway as you possibly can. That is a matter you must take up yourselves. There is no one here in Albany to solve that problem for you. We ought to commence and from now on, in relation to future construction of roads, to know where we are finally coming out; what roads we are going to build, what roads we are not going to be able to build, and have the matter come to us with some unanimity of action if possible and not have to decide the question here as to what roads should be built or whether it should be this road or that.

The people from Monroe county are meeting and solving this question I believe along the right line. They are going to try and work out a scheme in their county to build a lot of their roads at

a cost of from two to three thousand dollars a mile and by spreading out that money work out the final solution now. The only way in my judgment that we can work it out is through your local boards of supervisors and your local committees. We might get into a controversy with your people, we might decide in a wrong way, and this ought not to be put up to us here. You ought to solve the problem as to where these particular roads go and when you have figured that out you want to see whether your local town superintendents can build these roads. If you can so arrange matters in your county that the town can take the contract, eliminate the contractor's profit and utilize your own road machinery, I think we can increase the mileage over what we have now on our maps. Now in Jefferson county we have one piece of road two and one-half miles long which we believe is a road which we can spend \$3,000 on with a town superintendent and give us a road perfectly satisfactory to the people in that locality. The people have reached a point where they think they are not going to get any roads at all. We are going to try to figure out specifications for some of these roads, get the town to make a contract with the State and let the town superintendent build those roads as an experiment to show the rest of the county what can be done to utilize their own forces and to get the roads they want in their locality. The Legislature have given me five million of the second fifty million. They undoubtedly will pass an act this winter giving me ten million dollars more. Now there is fifteen millions, a third of the money practically. If they give me this fifteen million this is what I intend to do; give a third of your money in your county for contracts already in existence, which probably will be awarded this year. What we want, what you gentlemen want, is to build just as many miles of road as possible with this money. We want your co-operation. This is the proposition we are up against. We have now completed 5,000 miles of road scattered here and there and all over with the great problem of maintenance of these roads to keep them in any kind of shape so that the people won't be dissatisfied with the department, and then to spend this fifty million dollars. I think you gentlemen are all aware that so far as this department is concerned now the only object and purpose we have is to try and give the people what they ought to

have, as good a type of road as we can build, and then maintain that road as it ought to be maintained. In working out that problem in the future I am in hopes that our scheme will prove a success. We are going to assign in the near future an assistant engineer to every county, and he is going to live in your county. In the larger counties there will be two such engineers. I want that man, wherever possible, to have his headquarters in the office of the county superintendent of that county. We can't bring results without your co-operation. If that assistant engineer can be in the same office where you are it will avoid a duplication of papers being sent out from this office, will keep you in touch with him and we don't want to forget that wherever these roads are built they are to be built by counties and you are just as responsible, under the law, as this department is that you have a practical road there and that it is built right. Now we want co-operation in this work. With an engineer assigned to your county the first thing whenever anything goes wrong is to take it up with him. Don't wait. Don't wait until the road is completed and then say this is not right or that is wrong. You must give the work your supervision when these roads are under construction. With that co-operation on your part, with this assistant engineer bringing it right down to your locality, I want to say that I think I am entitled to hold you as responsible for these roads as the assistant engineer or engineers and I have announced that we will not accept any road in this State which is not accepted by the county superintendent. Now that co-operation we have got to have and you can appreciate why. With this State so large that we can't project a sufficient force from this department ever to cover it, I don't care who is at the head of it, we can't get results without your co-operation. In order to know that in every county of this State we are getting the results we ought to get, we must have the earnest co-operation of every county superintendent in the State. There is so much criticism about our roads, about the men who are constructing roads, we must be particularly careful at this time to see that everything within reason is procured for the State of New York. We want your co-operation and the co-operation of the boards of supervisors and the good road committees. If these men don't get the roads into shape, if the assistant engineer don't give you any assistance, then take it up with the department down

here, but I believe that these matters can be taken up with this man in charge without having to go to your division engineer or to come to this department at Albany.

One other thing. The question of your town superintendents. My own judgment is that this matter should not be taken away from your own locality. There should be home rule for your town superintendent, but if you would apply the same law as now applied to the county superintendents; let the town board appoint the town superintendents but from a civil service list; appoint him for four years and let your minimum wage be a little higher so you can't jew a man down to \$2 or \$2.50 a day. That is the most feasible way I believe. Let them be appointed from a civil service list, appointed by the town boards and I would give the county superintendents the right, if a man won't work properly, to get rid of him and then you can hold the town superintendent, through the county superintendents, responsible for his work. I believe if such a law were put through, with your co-operation it would work out all right.

I have met practically all of you gentlemen. I want to talk over with you all your road situations. I will be here this afternoon and all day to-morrow and will be glad to go over the situation in your county. I want to impress upon you that the department now wants your co-operation. If you give it to us, as I think you will, then this year we can make a showing in New York State about which no one can be fairly criticised, I mean *fair* criticism. It is up to you and up to this department and up to me to get into co-operation and if they will leave us alone this year I assure you that we can give the service to this State this year that may not satisfy everybody, certain newspapers perhaps, but *will* satisfy the people who want these roads and we will try to give them an economical, intelligent administration of this department which will bring results, the results that they want us to bring about. (Applause.)

Mr. DAYTON.—We want to assure Mr. Carlisle of our loyalty and support and I move you that those county superintendents who will co-operate with him and afford him all the loyalty in our power, stand up.

Rising vote taken.

Mr. WILLSON.—Gentlemen, we had one paper on our program which has not yet been read. Mr. Howard of Malone was to read a paper on the county road system. He was unable to be present but has sent a paper here which I will ask Mr. Buck to read to the convention at this time.

COUNTY ROAD SYSTEM.

County Supt. S. A. HOWARD.

I feel that in writing up this subject I am trespassing somewhat upon your good nature. This subject has been discussed by me at the two last Albany meetings, and as most of you attended the June meeting at Malone, you, yourselves, are able to judge of the merits or demerits of a county road system as adopted by Franklin county. But notwithstanding the aforesaid, I was told by the Third Deputy Commissioner that if I did not prepare something upon this subject charges would be preferred against me for misfeasance in office. Knowing that the State Highway affairs of the past have always borne the best of a reputation I would reluctantly be the cause of starting an investigation or inquiry into the conduct of even an humble county superintendent.

During the early summer of 1910, the various civic bodies of Franklin county became very much interested in the subject of better roads for our county. Our people had come to the realization that in order to hold our hotel business throughout the Adirondacks, in these days of the motor vehicle, it was necessary to provide roads that could be used by motoring tourists; also that our farmers must have better roads in order to supply the markets made by the tourists through the medium of our summer hotels. At that time we had but a very small mileage of State improved road, and what little we did have was scattered as it were to the four quarters of the county; figuratively speaking, starting from nowhere and ending at nowhere. Having no direct connections, these few miles of roads only accommodated the few farmers living along them, and at that only for a neighbor's call or visit. After there had been held quite a few meetings throughout the county, and many different ways and means of improving our roads had been discussed with no definite program in view, I, at a meeting

held at Saranac Lake early in the summer of 1910, proposed a county system of roads to be built at the sole expense of the county, and to be maintained when completed at the joint expense of the county and State. This idea was taken up at once, and, with the hearty co-operation of all parties interested in good roads, we were able to obtain the passage of an act by the board of supervisors at their November meeting authorizing a county system of improved roads. Subsequently this act was legalized by the Legislature and became chapter 137 of the laws of 1911.

This act provided for the issuance and sale of five hundred thousand dollars' worth of county road bonds of the denomination of one thousand dollars each, interest to be paid semi-annually at a rate not to exceed five per cent. Four hundred thousand dollars' worth of these bonds were sold as provided by this Act, but, owing to a question of the constitutionality of the act being raised by the purchasers of the last one hundred thousand dollars' worth of bonds, it was necessary to once more go to the Legislature and secure an Act legalizing the last hundred thousand dollar issue. I might say in passing that the claim has been made that our act as passed by the Legislature in 1911 is unconstitutional, it being special legislation inasmuch as it only applies to Franklin county. As this question has been seriously raised, I would advise that a general bill be prepared and enacted into law that would provide a county road system that any county might take advantage of, thus making it a general law.

The Act of 1911 provided that "the sum of three thousand dollars per mile, or so much thereof as may be necessary for the construction, maintenance and improvement of said county road system, shall be set apart and restricted to the actual mileage provided for in each town of said county through or into which said county road system extends and shall not be used for the construction of such road within another town until the road of the first town has been completed." I believe this to be a very wise provision and that it should be enacted into any law providing for a county system. It eliminates any question being raised of expending all of the funds in a few favored towns having an abundance of political pull; it starts the builders of the system off with the assurance that they are unhampered by selfish motives and are in a position to give every town a square deal.

Our Act provided "that a commission to consist of five members shall be created to represent the board of supervisors in the management of the construction and maintenance of said system, three members of which shall be members of the board of supervisors designated by the board, the fourth member to be the county superintendent and the fifth member shall be chosen by the four members above designated." Please permit me to here state that whatever measure of success we have met with in constructing our county road system in Franklin county has been brought about by the good advice and wise counsel of the four other members of the Commission furnished the county superintendent. If I was called upon to suggest an amendment to this section of our law, I would provide for but two members besides the county superintendent, making a Commission of three.

The original act or resolution as passed by the board of supervisors in 1910 designated the roads within each town that should be improved, and which, taken together, should make up the county system. No roads were designated that did not either connect with a state or improved town road, thus making a connected system of roads for the whole county.

Before beginning construction, we adopted standard specifications for water-bound macadam and gravel roads; also for concrete culverts and guard rail. All of our roads have been built 22 feet from ditch to ditch with the metal 10 feet wide where macadam, and 12 feet where gravel was used.

The entire system as laid out by the board of supervisors comprised one hundred and thirty-four miles. Of this we have a hundred and twenty-four miles completed, building the same in about fourteen months' time.

The Franklin County Road Commission received from the sale of bonds, interest at banks, premiums on bonds, and other miscellaneous receipts, \$535,934.19. Out of this amount, there has been expended for road construction, machinery, tools, etc., \$507,339.88, leaving a balance of \$31,594.31. In addition to this balance we have over \$50,000 worth of road machinery paid for. About half of this machinery will be sold this season, the proceeds being used, with the balance of \$31,594.31, cash on hand, to complete the remaining ten miles uncompleted.

You will note that in addition to the \$3,000 per mile set apart for the mileage in each town, we had a large contingent fund that we used for the construction of roads the cost of which exceeded the \$3,000 per mile.

On the 124 miles of road mileage constructed, we have built 353 concrete culverts with no culvert less than two foot span. We have also erected nearly one mile of standard guard rail. All our work has been done by day labor, no part of the work being let by contract. The entire system was divided into sections and for each section there was provided a foreman at \$3.50 per day and an assistant foreman at \$3 per day. The foreman was held responsible for all work on his section. No expensive engineering or red tape was carried on, and we believe that every dollar was honestly expended upon our roads.

To you county superintendents that are contemplating a county road system for your county, permit me to say that you won't find it all sunshine. Dark clouds will appear from time to time; Old Discouragement will come around about so often and whisper in your ear; the Green Monster will appear through the medium of disgruntled souls to slander you; the fellow who sits on the cracker barrel at the country store day after day and figures out the destiny of our great and glorious country, will not always agree with you and your methods. No, it won't be all sunshine as the work progresses, but what about that day after fourteen months of toil and strife? That day when you go out, crank up the old auto, throw in the clutch, and take a spin over the hundred and twenty-four miles of improved road, and hear, as it were, the singing of the birds, and see the blossoming of the flowers and trees, and, as you meet some weary farmer along the road, hear him say, "Well done, Mr. County Superintendent, you have been an honest, faithful servant." I say, what about that day?

MR. WILLSON.—I take pleasure in presenting Mr. Ricker, the first deputy, who, being in general charge of all State and county highway construction, I am sure you will be interested in hearing from.

MR. RICKER.—Gentlemen,—

MR. BUCK (interrupting).—Wait a minute until the stenographer comes in.

Mr. RICKER.— I hardly think that a stenographic report of my talk will be necessary. I had not expected to be called on for a speech and have no matter prepared, and I don't know as it would make much difference what I say, anyway, as I recently remarked to Secretary Fuller, "If the Highway Department does not get busy pretty quick and let some roads, there won't be any Highway Department." I have hardly had time yet to get thoroughly acquainted with the county superintendents of the State generally, but I am told that there are fifty-seven. In looking over this assemblage, the meeting of the county superintendents of the State, it looks to me as though there must be about a hundred and fifty-seven.

Mr. Carlisle has undoubtedly been talking to you about co-operation. I did not hear his speech, but it is a safe bet that that was what he was talking about. I know it is very close to his heart and he intends and expects co-operation given him by this and other organizations and these various organizations are really one because they are all devoted to the same purpose and have the same work at heart. We are getting out plans as rapidly as we can. I have found from going over the plans which have been sent in to me from the various division engineers, that they are planning better, heavier roads and with better attention to detail than has ever been had before. That you already know about for you have to participate in the preparation and signing of these plans, at least some of them, and you will have to participate in the closing of these contracts, and that is something that I have had—cordial co-operation from the county superintendents, in the final estimates and supplemental agreements to close contracts. Perhaps Mr. Carlisle told you that in the future we do not intend to close these contracts without your approval, but in order that you may give them intelligent consideration, and when you approve of them know that they are right, you will, of course, give close attention to the work as it goes on. You will be furnished with more information, I believe, than you have been furnished in the past. With this cordial co-operation that he has asked you for, I am sure we can go on and build better roads.

You wanted to have a look at the fellow who was first deputy and see what kind of a chap he was, and I might mention, or might

pretend as my friend the Commissioner does, that I was a farmer, too.

One of the important considerations in the construction of our new roads is the proper treatment of grade crossings, and to that end we have augmented our Bureau of Bridges, so that a great deal more attention may be given to the treatment of these grade crossings elimination. Mr. Carlisle is anxious to have as many of these crossings as possible taken care of and have the dangerous features of the crossings eliminated. Mr. Hermans, who is now in charge of that work, has come from the Barge Canal office, where he has had a large experience, and he is giving great attention to that work. Whenever plans come to me for a new road the first thing I think and look for is the railroad crossings. If it is possible or practicable or desirable to eliminate that crossing we start it going.

The feature of alignment we are giving a great deal of attention to, to eliminate as far as possible unnecessary grades. I hope we will have a very much better record of this work than ever before so that as the work goes on we will have a more definite knowledge of the work that has been done. We were able to outline the other night at a banquet of The Road Builders Association a plan for a better and more careful inspection of the work, to avoid the delay which follows completion of a road before the contract may be closed. It is my purpose to have three or four or half a dozen competent engineers, men who are experienced in road construction, men of mature years, if I can secure such men, and start them out while the road is being built and have them represent my office. You probably know that on final inspection I must approve the acceptance of these roads before Mr. Carlisle will pass them. In order to save time in closing up the contracts and in order to facilitate payments to contractors, where so many delays have taken place in the past, I purpose keeping a record and having reports from these inspectors whom I will send out, reports at least twice a month. That report will come to me and I will take up any question that is raised by these men, what they tell me, criticisms that they make, to the end that the work may go on in the way it should and when the road is done and the recommendation of acceptance is received from the division engineer and

the county superintendent, we may close the contract, and if it is finished at the very last part of the season, when the snow and ice cover the road it won't be held up all winter.

I think that is all, gentlemen, that I can say to you. I am very glad to meet you collectively and will be glad to meet you individually, whenever you come to my office. (Applause.)

Mr. WILLSON.— Now, gentlemen, we have some other things listed for discussion. At the meeting held at Malone in June there was an executive committee of county superintendents appointed. I am going to do something rather unusual, something that has not been done before. As far as the Highway Department is concerned for the time being, for the discussion of any subjects that you county superintendents want to take up, I am going to turn this meeting over to you. Go just as far as you like in your discussions, and criticise even the officials here. I am going to ask the members of the executive committee to come up here, their chairman and secretary, and take charge of this meeting.

County superintendent George C. Diehl, chairman of the executive committee, took the chair.

Chairman DIEHL.— The executive committee, gentlemen, was appointed for the purpose of presenting to the Legislature amendments to the Highway Law. I want to say that this committee can't produce results unless you help them. You have got to hold up our hands. You should decide what amendments you want to the Highway Law, not trivial amendments but important amendments, and this committee will try to get them enacted into the law. I admire the spirit of Mr. Willson in wanting us to talk this over in order that it may be a reflection of the county superintendents rather than the State Highway Department, although we may both be one.

I want to say first of all that I appreciate and sustain what Commissioner Carlisle said, that we can't get results without co-operation, without loyalty. The one statement I want to make exception to, and I don't want to do it discourteously, and that is that he would hold a county superintendent just as liable in the preparation of plans and just as liable in the matter of the acceptance of a road as the State Highway Department. I say

that is not fair. There are conditions in the various counties that we know nothing about. You will hear people say throughout the different counties, "If there was a good county superintendent in that county, things would be different, etc." I say that that is not a fair proposition, that the county superintendent is not in any shape or form liable for many of these conditions. (Applause.)

The first subject for discussion is amendments to the Highway Law. First, The election of a town superintendent for a period of four years. The discussion will be limited to three minutes for each person.

Mr. DAYTON.—I would suggest that section 42 of chapter 25 of the Consolidated Laws be amended by striking out the word "two" after "The term of office of a town superintendent elected or appointed as provided in this article, shall be" and inserting in the place thereof the word "four."

Mr. TIBBITS.—I can say what I have to express in less than three minutes. I agree with the Commissioner exactly in regard to his proposition of a town superintendent. I don't know whether you heard it or not, Mr. Chairman.

Chairman DIEHL.—That the town board appoint the town superintendent from a civil service list for a term of four years?

Mr. TIBBITS.—Yes.

Mr. McEvoy.—I want to say that I say Amen to it.

Mr. BIRD.—I am heartily in favor of the appointment of a town superintendent for four years after a civil service examination.

Mr. BRENNEN.—In this matter of civil service examinations, I feel that I am in a measure qualified to speak. I took an examination some fifteen years ago for a civil service position and landed high enough on the list over a great many men who would have filled the position better than I because of the fact that I could spell a little better than they. Last year in my county I had charge of building twenty pieces of county roads, ranging from five thousand to twenty thousand dollars a mile for construction. We had a civil service examination for the purpose

of getting inspectors on those roads. The men who would have given the best service, who would have made the best inspector of roads, were so far down on the list that I could not get at them and the men who were at the top of the list, while I have no doubt they did it fairly, I could not figure out how they got there. So far as our town superintendents go, I would say that in our county the men who write the poorest letters, violate the most rules of orthography, build the best roads in the county. I don't feel that in Niagara county we need any change in the method of electing town superintendents or need to lengthen their term of office. In the year 1909 the election resulted disastrously. There were only three out of nine for re-election who survived the ordeal of election. Of those who survived last year, out of a possible twelve, nine of whom were candidates for re-election, eight were re-elected and more than half of them with an adverse political majority. We are educating the people up to the point of keeping a good man in his place.

Chairman DIEHL.— Three minutes up.

Mr. DAYTON.— I am glad to know that Mr. Brennen somewhat coincides with my views. I was afraid that I might be alone. I am glad to know that the town superintendents are elected by their friends and neighbors, by people who know them. One of our best town superintendents has had to have his wife write his orders for him. You get better results I believe by letting them be elected by their neighbors. I want a town superintendent to know that he has four, not one, year. I want it to be home rule because I want the town board to have the same authority as it has now. It can be arranged very nicely and the towns are entitled to a certain amount of home rule. The only suggestion I want to make is to let the town superintendent have four years in which to make good.

Chairman DIEHL.— Any further suggestions?

Mr. MURRAY.— In regard to the town superintendent being appointed, I would say that a town superintendent be elected for four years and the only proviso be that they be able to read and write. If he can't read or write it has been my experience that you have a lot of money wasted.

Mr. McCLINTOCK.—I want to say just a word from my own experience. We have nineteen town superintendents and in but three cases has it been necessary to bring proceedings. In no case was it necessary to go to the extreme. The simple fact that the State Highway Commission made a complaint was all that was necessary to make those people do better. I asked the Civil Service Commission for a clerk who could run a steam roller, and they allowed me to have the man I wanted. (Laughter.)

Chairman DIEHL.—Any further discussion?

Mr. McEVoy.—I have had in my county a town superintendent for four or five years who the town board was afraid of. I think like this. There is now the power of removal by the town board. There ought to be an amendment so that the town board have the power of removal and also the Commission. The county superintendents are removed either by the board of supervisors or the Commission. Why not make it so that when the town board don't act the Commission can.

Mr. DAYTON.—I don't want at this time to create any friction between the town board and the Highway Department. I believe in home rule and I believe that in removing from the hands of the town board any powers which they now have is not advisable.

Mr. TIBBITS.—I wish to ask a question regarding the civil service examination which a town superintendent would take. Would it be a county board of examiners?

Chairman DIEHL.—I should say it would be held by the State Civil Service Commission.

Chairman DIEHL.—I will entertain a motion on this subject.

Mr. McCLINTOCK.—Mr. Chairman, I don't want to vote against that proposition of four years but I do want to make the motion that the subject be laid on the table.

Chairman DIEHL.—That is the first time, Mr. McClintock, I ever saw your side step. Let us come here and be willing to say something, let us come down here and not be afraid to say something. The fellow who does something and makes a mistake is a darn sight better than the fellow who never does anything.

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Motion was made and seconded that the matter as prepared by Mr. Dayton be adopted.

Mr. CREGIER.— I move to amend this motion, that in addition to the matter as read by Mr. Dayton that the method of elimination be amended.

Chairman DIEHL.— In order to simplify matters I am going to separate the vote and ask all those who are in favor of amending the statute so that the town highway commissioner serve for four years instead of two, stand.

Motion carried. It is the sentiment of the county superintendents that the term be four years and the legislative committee is instructed to advocate that change.

Chairman DIEHL.— Now as to the second part of the motion regarding the method of removal.

Mr. CREGIER.— I would suggest that this be changed by granting the power to the Commission.

Mr. HODGMAN.— There was a bill introduced in the Legislature of 1913 which took care of that very nicely. It was passed by the Senate but in the last days of the Assembly was forgotten.

Chairman DIEHL.— Is there any discussion as to whether the town superintendent shall be removed as at present and also that the State Highway Commission shall have authority to remove him. Any further discussion before I put the motion? All those in favor of the motion of Mr. Cregier amending the statute so that the State Highway Commission will have the power to remove the town superintendents, please stand.

Motion carried.

Chairman DIEHL.— The next subject for discussion is the minimum salary of town superintendents. The question is open for discussion.

Mr. TIBBITS.— I move that the minimum salary be fixed at \$3 per day.

Mr. HODGMAN.— I second that motion.

Motion carried.

Chairman DIEHL.—The next subject is Additional State Aid for a new class of roads.

Mr. WILLSON.—Gentlemen, I understand that the Governor would be pleased to meet the county superintendents at about half past four. If it is your pleasure to go over there, I would like an expression.

Motion was made and seconded that the county superintendents accept the Governor's invitation.

Mr. DAYTON.—We are all in favor of additional State aid on our town highways but there should be some equitable arrangement for this so that each county would get a proportional amount.

Mr. MURRAY.—This is a pretty wide subject and I make a motion that we put it over until to-morrow to talk it over.

Chairman DIEHL.—I am going to make the further suggestion that if we put it over until to-morrow that you want to talk about it then and transact business. There are the two propositions. Additional State Aid for the town highways, and a new system for the county. Under the proposed new county system 50 per cent. of the cost is to be paid by the State, 35 by the county and 15 per cent. by the town; under control of the county superintendents, cost not to exceed \$3,500 per mile; work done not by contract but by day labor using town machinery; town to allow an average of \$50 per mile for maintenance out of highway fund, first item. We must certainly choose one or the other of these propositions. We can hardly hope to have both.

Mr. BRENNEN.—I would heartily favor either one of those propositions with one exception. Conditions differ so materially in different parts of the State that the maximum is altogether too low to meet the conditions in certain localities. Some of the towns in our county we have been able to build fairly good macadam road around \$3,500. In other places we can't build them for less than five or six thousand dollars a mile. I would also say that the 35 per cent. by the county be cut down to twenty-five. Leave the fifteen by the town as it is and put a 10 per cent. on the frontage.

Chairman DIEHL.—I would like to ask for an expression of opinion. Is it the wish of this meeting that we come back here

after seeing the Governor and meet again or shall we adjourn until 10:30 to-morrow morning?

Mr. TIBBITS.— I move that we adjourn to meet the Governor and reassemble here to-morrow morning.

Motion seconded. Meeting adjourned until nine o'clock sharp to-morrow morning.

Mr. MACE.— Can't we settle to-night before we go which one of those road propositions we shall favor. If we settle that to-night we can be thinking it over. I would favor the last one I think.

Mr. SEAMAN.— I merely wish to say that my county has had a county road system for over fifteen years. I think it has been very satisfactory. The county superintendent should be at the head of the county roads just as the town superintendent is the head of the town roads. I have noticed that you say "not by contract but by day labor." I think it should read, "By contract or by day labor." It has been my experience that you can get better work by contract than by day labor.

Mr. BRENNEN.— I think that by using your town superintendent, by utilizing your town machinery, you can cut out the contractor's profit and can build a system of roads better by day labor. I favor it because it enables us to utilize our machinery which stands idle months in every year and also enables us to give our town superintendents more continuous work.

Chairman DIEHL.— Any further discussion? If there is no further discussion we will vote. All those who favor the new class of town highways as opposed to the new system of county highways, please stand. Not carried.

Those who are in favor of the second class of county roads please stand. Carried. Then the subject to be discussed to-morrow morning is the new county system of roads. Please bring your suggestions in writing.

WEDNESDAY MORNING SESSION, 9:30 O'CLOCK.

Chairman DIEHL.— Discussion of the subject of county roads is now in order. This is the matter we had under discussion when we adjourned yesterday.

Mr. BOGARDUS.—Mr. Chairman, I want to say that we are interested in the county road system and have been working it out under section 320, so-called, and for the information of some who have not had experience I might say that 320 does not permit the building of county roads as we are beginning to regard the work as relating to county road system. The Attorney-General has held otherwise. He says it is a town road being improved by county assistance. I think you have got to get away from 320 section and formulate an entirely new law which will set up a system of county roads and it is quite a big undertaking, in my judgment, to get up an amendment which can be made workable in all counties. We have discovered in our small way that a great many of the matters which have been brought up here and are bound to come up should be left optional with the county. That is the board of supervisors should have the option of letting the work by contract or by day labor, as the situation may suggest. That clause we often see in the law, "As determined by the Board of Supervisors" seems to me to care for a lot of these troubles. I am impressed with the fact that there is a wide field before you in the consideration of this matter of a county system. I will simply say further that I was glad to see you turn down yesterday a supplemental town system. In my judgment that was nothing more than the old system brought down to date. It did not strike me as having very many commendable features. I think the county road system eventually may absorb the town work in a way, the two may be combined to the advantage of all concerned.

Chairman DIEHL.—Do you think, Mr. Bogardus, that there should be State aid for this county system of highways, and would you think it wise that a portion of the fifty million, now devoted to State highways, be devoted to this county system?

Mr. BOGARDUS.—I should think it unwise to disturb this present fifty millions. The people are expecting it to be spent in certain ways and I don't think we ought to disturb it materially. It has occurred to me that the present State and town highway fund might be made available, with certain conditions optional with the county or town board, and be applied to this county system. Further than that I have not given that question much consideration.

Chairman DIEHL.—I will read this proposition over again. "New county system of roads. Fifty per cent by the State, 35 per cent. by the county and 15 per cent. by the town; under control of county superintendents; not to exceed \$3,500 per mile; work done not by contract but by day labor using town machinery; town to allow an average of \$50 per mile for maintenance out of highway fund, first item."

Mr. DAYTON.—I am very much in favor of the plan because in our county we have been talking over something which would supplement the State roads. I don't believe you can divert any part of the fifty million without putting it to a vote of the people. I would still follow Mr. Carlisle's idea and where a county has a considerable amount to be built, stretch it out with cheaper construction. Give to the people a road that won't cost so much, not over \$3,500 a mile, a waterbound macadam road and not such elaborate grading, so that we can with this 50 per cent. assistance from the State build this cheaper type of road. I want to do it by using town machinery, town forces, and pay this money to the town and follow it along under the town road plan, but we can't afford where our assessed valuation is low, to cover the mileage we ought to cover. We will have say 10 per cent. of our mileage covered by the State roads when the roads already built and to be built, which are on the map, are completed. Some of them are important roads. We have a little permanent work done under the town plan. Eight and one-half miles last year.

Mr. McEvoy.—Regarding Mr. Dayton's statement about the \$50,000,000, in my county, Yates county, they were very much opposed to the second fifty million until the money had been divided. If any way should be devised now to take that away from them there would be trouble. They would say we had practiced duplicity, now that we have the money we are going to take it away from them.

Chairman DIEHL.—How about putting in a cheaper type of county highway?

Mr. McEvoy.—Something like that could be done.

Mr. COREY.—I think it is very important that if these roads

are ever built they be built along the line of some system, and before starting in to build that we formulate our system and build our roads according to that system. I would suggest that the towns pay 15 per cent. of the cost but in the case of a poor town, in building a connecting road, the board of supervisors in their discretion may vote such relief to that town as they see fit.

Chairman DIEHL.—Is there some other discussion of this county system of highways?

Mr. McCLINTOCK.—The Efficiency Commission has been figuring out that the way the appropriations are coming in there will have to be a larger direct tax to meet them. In my judgment there is no more possibility of getting any more money for a new system of highways than there is of flying. I would make a motion that this question be laid on the table.

Mr. TIBBITS.—Mr. Chairman, the matter could be sifted down to the question of a county road system, giving the county the right to construct by contract, eliminating the question of State aid. That would suit a good many of us. I would amend Mr. McClintock's motion and have the law so amended, so changed, that we have the right to proceed without contract.

Chairman DIEHL.—If there is no further discussion I am going to put the question and ask those in favor of this method to stand. The proposition is to amend the highway law providing for a new county system of highways, 50 per cent. to be paid by the State, 35 by the county and 15 by the town; under control of county superintendents; not to exceed \$3,500 per mile; work done by contract, or otherwise, using town machinery; town to allow an average of \$50 per mile for maintenance out of highway fund, first item. Every step of this work is to be under the regulation of the State Highway Commission. The plans and specifications would be prepared or approved by the county superintendent and in turn would have to be submitted to and receive the approval of the State Highway Commission, and when completed meet the approval of the State Highway Commission before they would give the 50 per cent.

Mr. BOGARDUS.—I agree with Mr. Tibbitts that this is not the time to ask for State aid. Not that I want to dodge the depart-

ment's control, because we can get along with that very nicely. I believe if you put the State aid into the matter you will lose the whole of it.

Chairman DIEHL.—Those who are in favor of the amendment as read for a new county system of roads, please stand.

Motion carried.

Chairman DIEHL.—I would suggest, unless there is objection, that the Legislative committee be instructed to draw up and push through such an amendment.

Motion was made and seconded that the committee be so instructed.

Chairman DIEHL.—The next thing is "regulation of town road traffic and for transportation companies."

SUPERVISOR FROM MONROE COUNTY.—I would like to state that my town has \$50 which we took as a fee from a line which operates a bus through Monroe county and runs through our town. We believed we had the right to license any public occupation and on the strength of that we exacted the \$50 fee. They offered to pay a license fee of this amount because they thought they ought to be under some supervision. We have the \$50 in our possession and we don't feel we have a clear right to use it and I would like to be advised by anyone who can advise me what to do with it. I think if they operate bus lines on our good roads they ought to be made to pay. It is the only system of taxation I know of that we could have. I believe that we have not at the present time an adequate system of licensing bus lines throughout the State. I think further that the money collected for that purpose could be well used in the town in which the bus lines are operated. This is operated on State and county highways, one of the best built in the State of New York, in Monroe county. We still have the money but we don't intend to use it until we are told how.

Mr. RICE.—Is that an annual fee?

MONROE COUNTY SUPERVISOR.—Yes, sir.

Chairman DIEHL.—These regulations for town road traffic should be discussed. Should it be regulated and if so, how.

Mr. CREGIER.—It is possible that this matter of transportation vehicles is as pertinent to Schenectady county as it is to many counties of the State. We have a number of bus lines which have been granted permits from the Public Service Commission. In almost every case these bus lines operate on State and county roads. For those roads our towns pays \$50 per mile and the State pays the balance, so perhaps it would be unfair for the town to exact further fees from the bus lines. However, we have at least one road which is a town road, macadam, and the bus line operating over that road has probably caused at least \$500 damage a year. It may sound like a ridiculous statement but I believe it is a conservative one. It seems to me that it would be fair to formulate some rule, based on a law, to allow the town to charge the company some reasonable fee for using a town highway and in cases where the roads are State or county highways, where the State and county maintain it, perhaps the regulation should be formulated in such a way that the charge should go to the State.

Chairman DIEHL.—What have you to say, Mr. Loughran, regarding the regulation of width of tire on roads?

Mr. LOUGHRAN.—In view of the fact that the county law now provides that the board of supervisors may adopt an ordinance, it is entirely up to them I think. We might use our influence with them. The county of Ulster, aside from the very large counties, gets as heavy a traffic as any county in the State in view of the construction of the reservoir. We have a separate highway system in our county entirely different from any other system under the supervision of the city of New York. I think this question of regulation might be discussed in the counties, surely something must be done.

Mr. COREY.—We in our county have been through the local regulation of traffic. I succeeded in getting my board of supervisors to pass a law regulating the width of tire to be made operative two years after the date of passage, to give everybody

a chance to change their tires and get new ones. The board of supervisors almost unanimously repealed the act because they said the farmers in the country would turn them down if they didn't. I move you that we request the Commission to publish an ordinance or regulation defining the load which may be carried on the different width of tire on town and also on State highways.

Mr. WILLSON.—Why should you ask the Commission to do something which is clearly the duty of the Legislature of the State of New York? Why should you ask the Legislature to delegate the power to the State Highway Commission? Why not ask them to make the law? Put it where it belongs. I think that is the proper thing to do with that.

Mr. LEWIS.—I was going to suggest what Mr. Willson just said. I don't believe in local legislation. I believe there should be uniformity as to load and width of tire.

Chairman DIEHL.—All those who are in favor of legislation being enacted regulating traffic on town roads, please stand. Carried.

Chairman DIEHL.—All those in favor of the legislative committee being instructed to prepare such an amendment to the statute will please stand. The distinction is whether we ask the State Highway Commission to do this or do it in the regular way. Carried.

Chairman DIEHL.—Regarding the granting of permits to transportation companies. Until we know all the facts in the case we are not in a position to intelligently discuss this subject.

A motion was made and seconded that in view of the fact that this was new matter a committee be appointed to investigate the subject and report at the next meeting of the county superintendents. Carried.

Mr. BUCK.—From remarks that have been dropped by the various county superintendents I am under the impression that a wrong idea prevails to a great extent as to what rights are conferred or as to what authority is given to confer rights to transportation companies, public corporations, etc., to operate on the

highways. These rights which are given by the Public Service Commission or by any town are not rights to travel the road. They are rights to collect fares or freight rates. Everybody has a right to travel over the road so long as he complies with the law. In some towns they have adopted town resolutions, the same as a municipality, or a town may adopt a resolution making regulations of this character. But don't ever think, don't confuse the fee that is paid for the privilege of collecting fares or carrying freight, with the idea that you are granting them the right to travel the road. They have that and you can't stop them so long as they comply with the law.

Chairman DIEHL.—The next topic is "County Superintendents' Control Over Town Highway Agreement Should be Actual and not Perfunctory; Best Method to Accomplish This." Is there any gentleman here who thinks that the county superintendent does not have sufficient control over the town agreement?

Mr. BRENNEN.—So far as this proposition is concerned, I am here to learn. I have no ideas to advance. I have approved agreements that were not exactly to my liking. I knew what I was up against. The different members of the town board broke the appropriation up into too many separate items and I did not see any way to get away from it. All I could do was to approve the agreement and then during the time we were spending the money try to show them where they were making a mistake. I can't give you any information or make any suggestions.

Mr. BOGARDUS.—I agree with Superintendent Brennen. I don't know how to suggest the remedy. I dislike to see the money peddled out to meet local influences and we have endeavored in all cases to provide against it and try to develop some other system. We have an accounting system back of it which helps us to do this because we keep track of each expenditure. In that way we get very close control of things during the season and are often able to show the people where the mistake is being made in small expenditures.

Mr. BRENNEN.—My suggestion would be that the county superintendents be given absolute control of the State aid. Expend it in any portion of the town that he saw fit.

Mr. DAYTON.—I believe the greatest progress comes from co-operation with the town board. I believe that any plan now to take from the town board the authority which they have or to give more authority to us would not be to the general advantage of the town road bureau. (Applause.)

Mr. McEVoy.—All the county superintendent can do now, as I understand it, is to approve the agreement as it comes to him.

Mr. Sisson.—I think the people of the town, through the town board, should have the right to say where the work should be done. I want co-operation, I want the boards with me. Most of the town boards in my county like to have me with them when they make their agreement. I think that we have a way to stop a thing that is wrong as it is. We need not approve the agreement and can put it up to the Commission.

Mr. MAVE.—I think if we get out among our supervisors and justices when they are making their agreement that we have harmony. A good many of the town superintendents and town boards think a good deal of their power is being taken away from them. We must have harmony to get good roads.

Chairman DIEHL.—Those in favor of leaving the law as it is will please say Aye.

Carried.

Chairman DIEHL.—The next thing is "State Aid for Bridge Construction."

Mr. MURRAY.—About a year or two ago I think the various boards of Supervisors throughout the State approved a resolution that State aid for bridges from 5 to 20-foot span be allowed. This went all through the different boards and I don't know whatever became of it. I think we ought to get together and have the law amended if we can. If we don't do it this year it is only a question of time when we will get at it. State aid to be paid on bridges not exceeding twenty feet. I don't see why if every county superintendent will use his influence with the Member of Assembly and his Senator why we cannot get it through.

Mr. COREY.—The town which is building a large bridge, any bridge over two or three hundred feet ought to have State aid. I have a town which is building one of these large bridges, an appropriation of \$67,500. Now, that amount of money burdens that town, and if any town is entitled to relief it is such a town as that.

Mr. BUCK.—It may simplify matters a little if I were to tell you what will happen in the way of introduction of bridge legislation this winter. In response to the unanimous request of the boards of supervisors of this district one of the Senators will introduce the so-called "Bridge State Aid Bill," which was passed last year and vetoed by the Governor. That will pay State aid on all bridges just as on the highways. I believe this to be the most just and equitable bridge bill that was ever introduced. The extension of State aid to a certain span of bridge only covers a very small portion of the trouble and another plan which has been suggested, and I think a bill was introduced last winter which I consider one of the most unjust of any legislation along that line which has been introduced, was a measure to put the entire expense of bridge construction on State and county highways as a part of the cost of that construction. That gives aid where it is not needed and no aid where it is needed the most. The location of the greater part of the mileage of State and county highways is through the wealthier communities. Those communities in general are not asking to be relieved of that bridge expense and there is no general demand to be relieved of it. It is the poor town that needs the help. Now, then, what happens? If the State pays the cost of bridge construction on State and county highways and extends no other aid, the wealthier towns where those improved highways are located are relieved of the major part of their expense, the poor towns receive absolutely no aid at all. With this other plan of making State aid on the bridge tax general then all get help and each in proportion to his needs.

Mr. BOGARDUS.—I believe we want the small bridge, 6, 8 or 30-foot span, or whatever it may be, widened to conform to the plan of construction on our improved roads as well as that great river bridge 600 feet long. You will find that that is being taken

care of on a different basis. When we find a State road 26 to 30 feet in width narrowed up to fifteen feet or so width of bridge floor, it seems to me that there is a lack of harmonious construction. In the poorest towns we have to relocate those bridge structures and call for new structures to conform with our simple little county road construction work and in every case the towns have been willing to meet this for the reason that they are to have the advantage of the general highway improvement. We are relocating all of those bridges and making the bridge work conform to our plan of county road construction in a way that will make the State authorities sit up some day and look us over.

Mr. WRIGHT.—Is there a possible danger in this limitation that if you give aid up to twenty feet there may be a tendency on the part of town boards to put in a 20-foot bridge where a 30-foot bridge was needed in order to get that State aid. The results might be disastrous.

Mr. BRENNEN.—As we have to approve the plans we will be to blame if we have a 20-foot limit and allow them to put a 20-foot bridge where we need a thirty. The whole thing narrows down, I think, to the proposition to get more out of the State. We can take care of the bridge proposition in our county. It would meet our requirements and conditions better if you will give us State aid at the rate we are now getting on all that the towns will raise.

Mr. DAYTON.—I participated a year ago in the discussion that led to the passage of the resolution requesting State aid on bridges as presented to the Legislature. That bill provided for a graduated scale on the same basis as the State aid is now given on highways—the poor towns getting more help and the amount was limited so that the amount should not become a burden upon the State. I am in favor of that bill again and I don't see any need of changing the opinion which I formed a year ago as regarding the bill which we should present.

Mr. VAN TASSEL.—State aid for large bridges is a help to the richer towns but I want to say that in Delaware county the poor towns are up against the proposition of building those long expensive bridges as well.

Mr. DAYTON.— I move that this body present to the Legislature the same State aid bridge bill that we had last year; that we reaffirm our opinion that it would be to the advantage of the State to pass that bill.

Mr. ROEMER.— It would seem to me that we would have a better chance of getting this through, that it would do more good to the towns if we limit the span on which we ask State aid. There are very few towns but can afford to build bridges under 40-foot span. Over 40-foot span it is a burden. If we should ask the State to aid us on bridges, say over 40-foot span, and the towns pay for everything up to that, it seems to me that we would be more apt to get it. It seems to me that our chances of getting that bill through would be a whole lot better.

Mr. DAYTON.— May I change the wording of my motion, that we endorse the Murtaugh bill as passed last year.

Mr. BOGAEDUS.— Under this bill it seems to me that you are going to ask for an appropriation of a million dollars.

Chairman DIEHL.— There was a limit in that bill of \$500,000.

Mr. Davis, county attorney of Warren county, was at this point given the privilege of addressing the meeting and gave an informal talk on the subject of bridges.

Chairman DIEHL.— The question now is on the adoption of Mr. Dayton's motion endorsing the Murtaugh bill. Those in favor of endorsing this bill will please stand. Motion carried.

Chairman DIEHL.— Commissioner Carlisle, gentlemen, made the statement that in the future the county superintendents will be held as responsible as the division engineers or the assistant engineers in the State road work. Now the law won't be changed. I think that we ought to adopt a resolution stating that our most hearty co-operation and loyalty are extended to the department but we must disclaim responsibility where we have no real authority; that while helping the department in every way in our power we must disclaim responsibility, both in the past and in the future, until the law is amended. (Applause.)

Mr. MACE.—I am sure that we hold no responsibility in regard to the State and county roads and also add to that, in regard to maintenance work. When they let a contract for repair work on a road and we have nothing to say regarding the letting or approving it I don't see how we can become responsible. How can a man become responsible for some other man's work? What time do we get to look after this work? I am heartily in favor of passing such a resolution as you speak of. We will help the Commission all we can but we do not become responsible for the highway work except to go over the plans and make the acceptance.

Mr. HODGMAN.—I think every county superintendent with a thousand or two thousand miles of highway in his county has enough on his hands. I don't believe we have any time for this other work. What is the road inspector for? Hold him responsible. I don't believe the county superintendent has any time to devote to these contracts.

Mr. McCLINTOCK.—I am inclined to think that it won't do any hurt to leave it without any resolution. If you will remember we have to approve the plans to start with, the county superintendents do. We have to do this before any supplemental agreement is made. Before the road is accepted we have to put our names on the approval. In other words, the law as it now stands evidently means that we shall know something about those roads. Ordinarily I have been willing to leave it to the department, taking their judgment, but it is a fact that in our county within my observation the roads which have been built by the department will stand the closest inspection. I am sure of that without having seen them all myself. I know that most of the roads have been well built, notwithstanding the furor which has been made about the difficulties in road construction work. Now, I will stand for the roads which we have built by the State in Monroe county and I am willing to take my full responsibility as it now stands.

Mr. TIBBITTS.—Why we should be asked to check up men who have the same interest, or should have, that we do we do not understand. We have more work cut out for us than we can do justice to. We should not be asked to take the responsibility of work which we have no time for.

Mr. MACE.— I do not wish to be misunderstood. I think it advisable that the county superintendents go over the plans because he knows in a great many instances the conditions and needs. Several times we have changed the plans and had new culverts put in, or those of larger size, and had sub-base put in. I think the county superintendents should do that, but to have the supervision of the work in detail I do not think we should.

Mr. BOGARDUS.— That brings up another point — we don't see always the specifications. What are we going to do about that? I want to co-operate in every manner possible but if we have had one plan come up and pass through the board without a specification, I have had a hundred, and furthermore, I have not been able to get those specifications after the contract was let for some little time. On the other hand the specifications should appear with the plans by law. They do not. It must be an oversight. I don't think it is intentional. I don't think the division engineers mean to do it. There is a discrepancy in our plan of work which puts us entirely out of sympathy with the idea of co-operation.

Mr. WILLSON.— Gentlemen, I think that Mr. Mace cleared up the subject somewhat. I think you misconstrued the Commissioner's remarks. What he intended was this; that when the plan is prepared it is up to you county superintendents to know whether that road fits the conditions; whether the culverts are sufficient so as to build an intelligent road over that location. I think that this is something that you should take an interest in. I don't think the Commissioner expects you to go into every detail of the road, but I do think that he expects you to have an eye on it so that when it comes to final acceptance you will know about it so there will be no delay at that time. I think that will facilitate matters very much.

Mr. MACE.— I want to give this credit to the Commission and to the department. My engineer has never let a road without going over the entire map, checking up the plans. We have no trouble along that line. He has been very friendly and I do not know of a single piece of road that we have not gone over together, but I don't like to be held responsible for every little detail that I can't look after myself.

Mr. WRIGHT.— If the town superintendents were to be equally responsible with an inspector over construction work and he discovers irregularities, how would he proceed under the present law?

Chairman DIEHL.— Notify the assistant engineer or the division engineer or the State Highway Commission the same as any private citizen and ask that it be corrected.

Mr. DAYTON.— This is comparatively a new era. A new Commission is here. If we have not before been asked to do these things it is our duty to do it now. We were not asked to do things a few years ago. There has been a tendency on the part of the Commission to recognize us and to co-operate with us and, therefore, we want to co-operate with him.

Chairman DIEHL.— I think the matter can well be held until some subsequent meeting if the necessity at that time presents itself for such a resolution.

Now about our next meeting. I have here a letter from the chamber of commerce of Niagara Falls but before we discuss that what do you think regarding the meetings of this body— do we meet often enough to accomplish the purposes we set out. Whether it is necessary to meet once in the summer and once in the winter. I want to ask for an expression of opinion from the County Superintendents. I am going to ask those who favor a meeting two or three times during the session of the Legislature in Albany to stand.

Mr. BRENNEN.— Mr. Chairman, I move that the Executive Committee be authorized to call County Superintendents together whenever, in their judgment, conditions require a meeting.

Mr. ROEMER.— I second that motion.

Mr. McEVoy.— I move to amend that motion. Why not let our Executive Committee act as representatives of this body and take care of these matters.

Vote was taken on the motion as amended and the motion was carried.

Chairman Diehl then read a communication from the Niagara Falls Chamber of Commerce inviting the County Superintendents to hold their next semi-annual conference in that city. County Superintendent Cole of Tompkins County then presented an invitation from the Chamber of Commerce of Ithaca.

Chairman DIEHL.—Are there any further invitations which any gentleman here wishes to present? I would like to say that I have not brought any paper from the Chamber of Commerce but since I have been here the idea occurred to me that since the meeting takes place in the summer we might better make it an occasion of recreation instead of working too hard. This idea of traveling over town highways has been rather over done. I have a little idea of my own. Instead of getting invitations from chambers of commerce, business mens' associations, etc., probably disappointing these people in the number of people we bring and the amount of money we spend, etc., suppose we pick out the place we want to go to and go there. Why not come to Buffalo? From there we can visit Niagara Falls, go around the Gorge Route, take dinner at the Clifton House on the Canadian side, and get back to Buffalo about five o'clock in the afternoon. We can then go to some vaudeville entertainment in a body or by ourselves, and the following day we could take a boat up the lake, and indulge in some swimming, etc. We will take a vote on the question as to our next meeting place, Niagara Falls, Ithaca or Buffalo.

Ithaca received the largest number of votes and was named as the meeting place of the Convention in June.

Mr. COLE.—We would request the commissioner to call the meeting for the latter part of June after the university has adjourned. Also request the Commission to hold the meeting three days.

Mr. DIEHL.—We will vote on the question of whether the Convention shall be held for two or three days.

A majority voted in favor of a two day session.

Chairman DIEHL.—The sentiment seems to be to hold the convention for two days. I greatly appreciate the courtesy which

Mr. Willson has extended in holding this meeting ourselves. It is the first time it has ever been done and it shows a different policy of the State Highway Commission toward the county superintendents. They are looking at the county superintendents in a different way from that of any other administration. It is up to one of you gentlemen, I think, to offer a resolution expressing our appreciation of this courtesy and to express our confidence in Mr. Carlisle.

Motion seconded and unanimously carried.

Chairman DIEHL.—I hope that Mr. Willson will extend this to Mr. Carlisle. Now the matter of spreading out the money in each county by building cheaper construction.

Mr. McCLINTOCK.—I move that this question be laid on the table.

Mr. Sisson.—I move that a committee of three be appointed with Mr. McClintock as chairman to make recommendations along this line at the meeting in Ithaca.

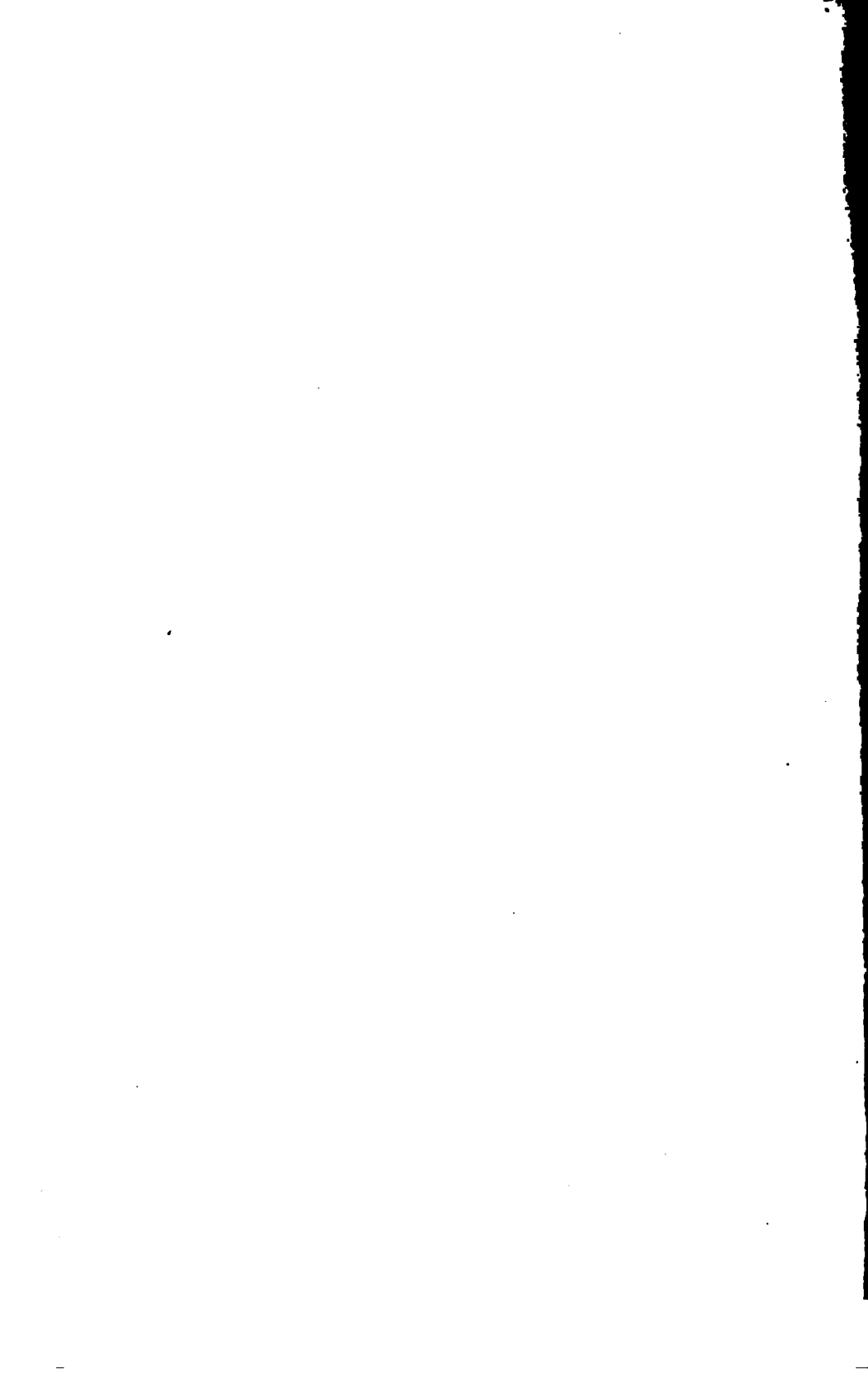
Motion seconded and carried.

Mr. WILLSON.—I won't detain you, gentlemen, but just a minute. I would like to have the county superintendents who have county road systems meet upstairs in my office. There are some matters we want to talk over. There are one or two things I want to call to the attention of the county superintendents. In some cases the town superintendents have exceeded their appropriations. Now it might be just as well to inform the official who does that that there is only one remedy for him. He has to go to his taxpayers for relief. We won't allow any excess of appropriation paid out of the highway moneys of 1914. You should notify your town superintendents that any town superintendent exceeding his appropriations incurs a personal liability and there isn't any relief we can give him from this office.

One other thing. Sometimes the towns are very delinquent in getting in their agreements. The agreement for this year's work, for 1914 work, must be on file in this office before permit is issued, before any permanent work is done. The supervisors

sometimes in certain sections are slow about filing their bond. Notify each supervisor that no State aid will be paid over and no other money ought to be paid over to him until a copy of his bond is filed in this office.

There is one thing I am going to ask of you county superintendents. I am going to ask that you try to see that the agreements provide for some permanent work. We have an increase in the amount of State aid of \$283,000. We built last year eight hundred and some odd miles of permanent highways. I think it is up to you county superintendents to see that your agreements are made in such a manner that a liberal portion of the money is set aside for permanent work. Under the increased traffic conditions we have to get more permanent work than in the past if we are going to get ahead. When you sit down to think it over you will find that we still have 90 per cent. of our roads to be taken care of locally. I am going to ask each one of you to make a special effort this year along the line of more permanent work. I ask your co-operation along these lines and I know that when we get there everybody will be well satisfied. We want to build roads that can be travelled three hundred and sixty-five days in the year. A good dirt road is a good thing, when it is good, but, as someone has said, a good dirt road is somewhat like the summer girl, with us but a short time.





STATE OF NEW YORK
DEPARTMENT OF HIGHWAYS

PROCEEDINGS

OF THE

ELEVENTH SEMI-ANNUAL CONFERENCE

OF THE

STATE COMMISSION

AND

County Superintendents of Highways of
the State of New York

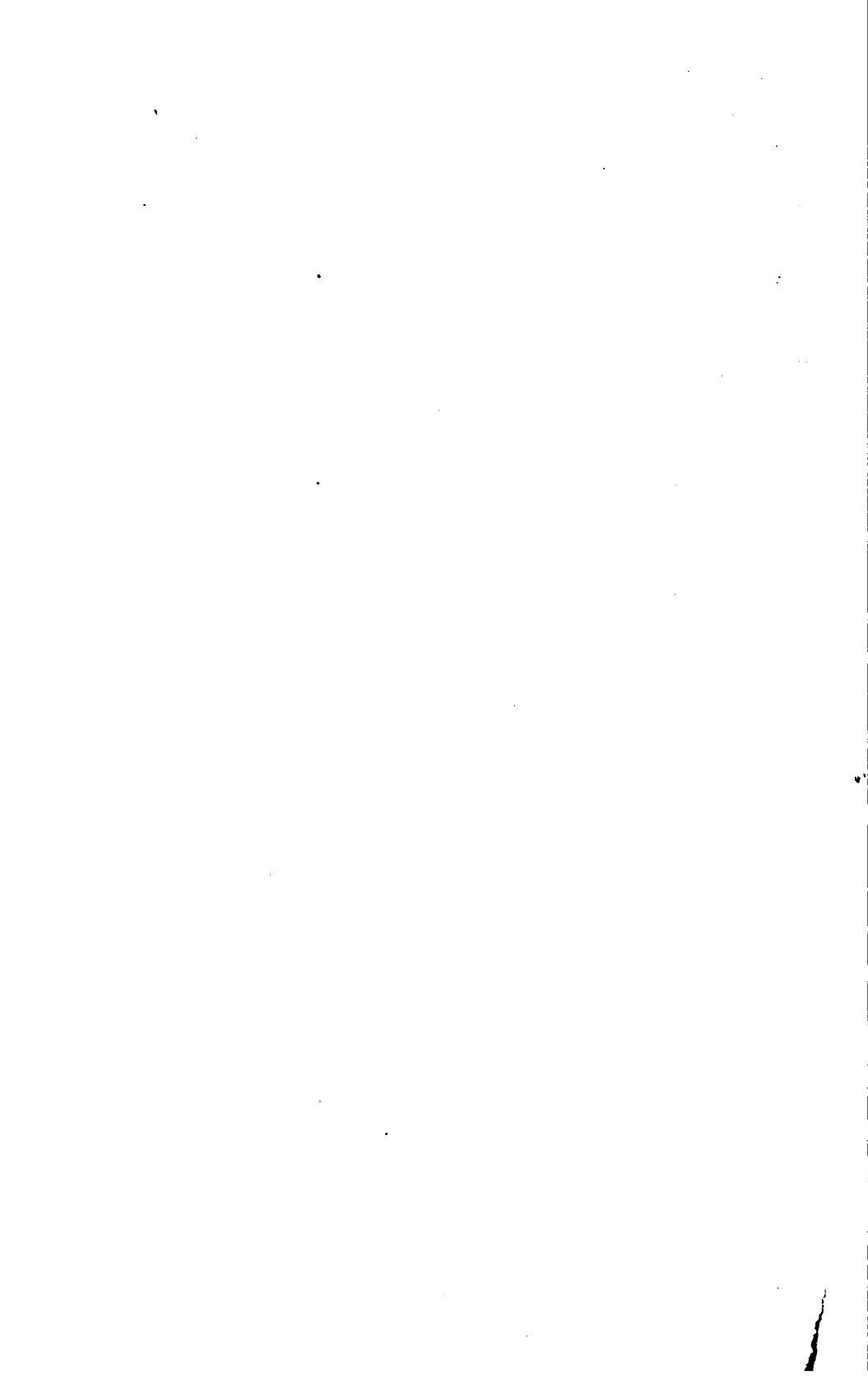
UNDER THE AUSPICES OF THE

STATE DEPARTMENT OF HIGHWAYS

AT ITHACA, JUNE 25, 1914



ALBANY
J. B. LYON COMPANY, PRINTERS
1914



**PROCEEDINGS OF THE ELEVENTH SEMI-ANNUAL
CONFERENCE OF THE STATE COMMISSION
AND COUNTY SUPERINTENDENTS OF
HIGHWAYS OF THE STATE OF
NEW YORK.**

Meeting called to order by Deputy Commissioner Walter F. Willson in the Court House at Ithaca, June 25, 1914, at 10:30 A. M.

MAYOR TREE.— Usually when a man is called upon to say a few words of welcome he naturally thinks over what he wants to say. Since I have been in here looking in the faces of this fine body of men — this isn't throwing bouquets — healthy in body, sound in mind, I have changed entirely what I planned to say. Speaking only of practical things, I first would like to express to you the welcome this city gives to you. We are not large, we are not extensive, and perhaps we are of that size that you can comprehend better than a large city, but I hope that you will take with you some things that will be pleasant to remember.

I have just one thought in connection with your work that occurs to me that I would like to express and go on record as saying. If I should ask our citizens, if I should ask in general the question, "What is the purpose of good roads?" I would be answered, not impractically, that they are for the purpose of promoting business. Now, gentlemen, I do not believe that is fair. I believe that you are engaged in a business for humanity's sake, that is greater than that of business. The work that you are engaged in promotes friendship, brings it within the province of every man, especially the masses, brings within their range a friendship and a knowledge of communities that it did not have before. We all know about this. From my own experience I find that I know more of our county, I know more of our State surrounding Ithaca than I had knowledge of before. So I want to

leave with you this thought, that your work is for the cause of humanity rather than for the cause of business.

I wish to express to you again the welcome of our city, hoping that you will enjoy it in spite of the weather. (Applause.)

MR. WILLSON.—*Mr. Chairman, Mayor Tree, County Superintendents, Ladies and Gentlemen:* When it was decided by our county superintendents of the State that the semi-annual conference was to be held at Ithaca I felt sure there was no doubt that the meeting and conference would be a success. From the large number of representative citizens I see from all parts of the State who are interested in road matters I am more than sure that the conference will be a success. I realize that the work of your citizens and your committees here in charge for this conference has been large and a lot of work has been required, and I wish to take this opportunity on behalf of the county superintendents here assembled to thank you, your citizens and your county superintendent, Mr. Cole here, for the effort which you have put forth to make our gathering here a success, and I feel sure that our conference will be a success and that great benefits will result from the conference with relation to highway matters throughout the State. I thank you. (Applause.)

MR. WILLSON.—Now, gentlemen, we are gathered here for a conference and I think at this time that we might devote a short space of time to take up any suggestions the county superintendents may have in regard to, well, matters of legislation, or anything the superintendents may be interested in, anything pertaining to highway matters, and there is one thing that I would like an expression of opinion on and that is the question as to the term of office of town superintendents. You know we discussed that at our meeting at Albany last winter and a bill was prepared making the term of office of town superintendents four years. Now the bill as drafted at that time changed the method of removal. The removal of a town superintendent was left to the Highway Commission or a representative of the Highway Commission. The removal was by the Commission, but the hearing was to be held either by the Commissioner or a representative of the Commissioner on any charges that might be preferred. Now charges

against a superintendent must either be preferred by the county superintendent, the district supervisor, the town board or by, I forget, five or twenty-five — I think perhaps twenty-five — taxpayers. Now the idea of the removal part was to take the disagreeable part away from the local authorities, and that particular piece of legislation, from what I knew of it, was entirely satisfactory to all of the different local communities. They desire to get rid of that part of it. But it seems to be an impossibility to get that bill started a great ways through the Legislature. Now, if the county superintendents assembled here believe that that is a proper piece of legislation, some effort must be made at home locally, through your boards of supervisors, by resolution or something of that kind, to impress upon the members of the Legislature that this particular piece of legislation is wanted and is approved by the local authorities. Now I would like to hear from some of the superintendents in relation to that and what their views and ideas are with regard to that particular matter.

Mr. TIBBETTS (of Madison Co.).— I am glad to have you take this matter up and I think the sentiments of our county are well expressed in the bill. In endeavoring to remove a town superintendent who was unfit I got up and presented to the town board the complaint and was told that no matter what evidence I had there would be no findings against the town superintendent, that I might just as well stop then and there. All that he was accused of was being drunk on the work day after day. I talked the matter over with him to see if he would not stop it, and he would not. I think that perhaps fifty or more per cent. of the town board would hesitate to act in a matter of this kind on account of what the neighbors would say. I think the bill as it stands would satisfy us thoroughly in that respect.

Mr. CREIGER (of Schenectady Co.).— I want to say that I still believe the bill is a just one and would work out to the best interest of the highway work. I still believe that we need just such legislation. It is not material whether the term is two or four years so long as we get anything that will give an opportunity to hear charges, and I am still in favor of the bill as drafted.

Mr. WILLSON.— I would like to know what the gentleman from Monroe thinks about this proposition.

Mr. McCLINTOCK (of Monroe Co.).— I do not know as I think anything about it. I have got nineteen good men and have no difficulty that is really serious in that line, but in getting a town superintendent disciplined the mere fact of making complaint, making charges against him gives us enough ground to discipline him sufficiently. Of course if we had a man get drunk, that would be an extreme case. But I think the wise thing is to leave that question just as it is at present. But while I am on my feet I want to say something and that is the importance of having this bill under the control of the gentleman who now heads the town highway bureau. Not only does he show his extremely broad experience, but he sympathizes with what we are trying to do. (Applause.)

Mr. DAYTON (of Cayuga Co.).— I am probably in the minority on that question, but I have said it before and I want to stand by my colors. I believe that the solution is simply to make the term from two to four years without any further change. I do not believe but what a county superintendent can handle this matter on the line Mr. McClintock has stated, but as a general thing he can get results without invoking the aid of his town board. At any rate, it is a poor plan, it seems to me, to give the town board the impression that you are trying to take from them some of their authority. I think the term of the town superintendent should be made over two years because two years hardly gives him a chance to get acquainted with his work. He is continually thinking of politics and a new election and makes little progress in his work. I am sorry that I do not agree with a good many of the county superintendents, but that is my opinion.

Mr. WILLSON.—Anybody else?

Mr. CREIGER.— Mr. Chairman, if I remember correctly, we had a legislative committee last winter.— I think Mr. Diehl was on it — and I would like to hear from that legislative committee.

Mr. DIEHL (Erie Co.).— Mr. Chairman, I assume that the reason that we have not been responding with more alacrity is

that this is the annual reaction from our arduous duties and our recollection was that we came here for play rather than for work. As far as the legislative committee is concerned, I think this legislative committee either ought to be put to work or thrown out of existence. And a very good reason for discharging this committee is that it has not been producing results, the members have not assisted the chairman and done their share of the work.

I always like to hear Mr. McClintock talk. Lately I have been operating as assistant county superintendent of Monroe county. We work pretty well together. McClintock plays politics while I drive the car. Unfortunately, the board of supervisors of Monroe county has not yet put me on the payroll.

But I do want to say one thing and that is that the proposition of the improvement of the township roads, the improvement of roads of lesser cost has been, in my opinion, overlooked in this State. The people are spending a good deal of money on State and county road improvement. Now I come from a county where there is no question that the main roads from the city require an expensive form of improvement. They require a most careful construction, but it is equally true that more money is wasted in the State of New York by building too expensive roads than in building cheap roads. All roads do not require \$25,000 per mile treatment. The work that is being done daily by the Highway Department is, in my judgment, returning dollar for dollar, but it is my opinion that more roads of an inexpensive construction should be built. This is not said in the way of criticism, but having in view the just proportion of things, taking into consideration the amount of money available, number of miles of road built and the character of travel. I have in mind a road I went over with Mr. Cribb, who has been connected with the town highway department for many years and is doubtless as well qualified as any other man in the State to judge. This road was built with good foundation and drainage. The State Highway Department has let a contract for \$11,000 for that road. Mr. Cribb said that for \$2,500 they could build a road that would answer every purpose and would accomplish everything that the other road would accomplish. This is simply to show that four times as much money will be spent on that road as is necessary. And I think that is one

thing that the people of the State can accomplish through the county superintendents — they can succeed in stopping spending these excessive amounts on roads that do not require it. Where a road really requires such treatment, build the expensive road. Where it does not warrant it, build the cheaper type of construction.

The work that has been done by the town highway bureau I believe is better than ever before. I believe that a great part of that success is due to the endeavor of the head of that department. I believe Mr. Willson came to that department with experience and knowledge that has enabled him to produce the best results and I think the men engaged in town highway work are to be congratulated in having as their superior officer a man who shows such unflinching courtesy and tact, slow to criticism, prompt to advise, and I believe that this meeting ought to give Mr. Willson a vote of thanks for the prompt manner and the courteous and efficient way in which he has transacted the duties of his office.

Now, just a word regarding the term of town superintendents. It strikes me that Mr. Willson made a very practical suggestion and that was that the boards of supervisors of the State pass resolutions favoring a plan of this kind. We can readily see that without resolutions along systematic lines the people down in Albany do not want to pass laws extending terms or anything of that kind. They naturally feel they are treading on the principle of home rule, and unless there is a decided sentiment expressed to them officially, either through chambers of commerce or boards of supervisors or automobile clubs, or other bodies interested, it is very doubtful whether any change can be made in the laws. The natural tendency nowadays is to give more power to all officials in charge, whether highway or any other, and of course the answer to that is that the good official gets results while the poor official does not. Now the proposition is to extend the term and enlarge the powers of all officials and then pass some sort of a law that makes it easy to get rid of those officials. In other words, make the term four years and legislate some convenient, easy method of getting rid of poor officials, and I think when you do that you will get results.

Now, regarding this legislative committee, I believe that we

ought to get some suggestions from the various county superintendents that are here. We are perfectly willing to listen to suggestions, we want you to tell us what you think we ought to do and if we cannot do it get somebody else.

Mr. WILLSON.— Well, have we made the office of town superintendent for four years, or what have we done ?

Mr. McCLINTOCK.— Mr. Chairman, I would advise along this line. It strikes me that this legislative committee has been delinquent; has been slow. I cannot think they have accomplished much besides drawing their salary, and I would like to suggest that this committee be confined and study the situation carefully in some place provided by the county superintendent. I believe that he showed me this morning where they have a place of confinement and I would suggest that they go to that place.

Motion seconded.

Mr. WILLSON.— As chairman, I do not dare put this motion to vote for fear it will be carried.

Mr. WILLSON.— Now there is one objection, I might say that the one objection that was raised, seemed to be raised to the bill as presented to the Legislature last year was that it simply took certain matters away from the local authorities in regard to the removal of a town superintendent. Now that was true of the removal part, but after the town superintendent was removed the authority to fill the vacancy was with the town board, so I cannot see where the local authorities were abused very much. The worst part was taken away and they were left with the pleasant part to do. They had authority to assign a superintendent to fill the vacancy. The bill never got out of committee.

Mr. McCLINTOCK.— Mr. Chairman, one point I would like to mention in connection with all these questions of changes in the Highway Law. I believe that you should ask these county superintendents here if they have a copy of the latest issue of the Highway Law. We cannot keep the old law as it is, even with its imperfections, until we become familiar with it, and it seems to me it would be well for us to insist on stopping this tinkering. We

are doing splendid work. We rode over from Rochester yesterday, over a hundred miles, a good deal of the way along stone roads and town dirt roads, and it made me proud to see what has been done. We came part of the way after a big shower and the roads were in splendid condition. We are doing splendidly, and I think it would be wise to discourage any more changes in the Highway Law, especially that part that has to do with the town work.

Mr. WILLSON.— Well, we seem to have exhausted this subject. One other question I would like to bring up that is rather important and that is additional State aid for town roads. Now, you wouldn't have any objection to that, Mr. McClintock?

Mr. McCLINTOCK.— I certainly would — for the present. Do you know the bill I think Mr. Diehl has advocated? Every time I pick up a paper I see a great long article about Mr. Diehl. The latest thing advocated by him is the improvement of the landscape along the highway, which would add a few millions of dollars to the cost of the roads. Now, we have a nice rich county. We are struggling along through improvement and we are doing fairly well, but at present people are accusing the town of doing too much. We have got so the people do not appreciate what is being done for them simply because it is too much, and I think it ought to be left just as it is. In other words, let well enough alone for a few years.

Mr. DIEHL.— I am surprised to hear my friend express any such sentiment as that. In the first place, Federal aid is meeting with opposition from some quarters for the reasons which Mr. McClintock has advanced, but as a matter of fact the State of New York does not want to take the position that because it is a rich State it is not going to help any other State. We profit by the prosperity of our neighbors, and in these days of automobiles our neighbors live anywhere within seventy-five miles of us.

The entire theory of State aid in highway construction was to apportion the expense of construction in proportion to the benefits accruing therefrom. In the olden days roads were improved with money the town raised without help from anybody else.

They hauled over those roads from the farm to the city, and the city people got the benefit and they didn't spend one cent for roads. They relied on the township doing all that improvement. After a century of endeavor the roads were not much better. The people who had the money, the people to get the benefit of the great concentration of wealth, the cities, which became rich because of the effort of the people on the farm, were not spending a cent toward the improvement of the roads, and yet they were sharing in the prosperity, and therefore it was decided that the counties should aid in the building of the roads, and that was only one way of dividing the expense. In a great many counties in the State of New York that works very well — where there are lots of big cities.

Now the same thing applies to the national government. Some of the states which are not so well populated need help from the other states. To illustrate, take the Commonwealth of Massachusetts, which has a valuation of \$200,000 for every mile of road; the State of New York has a valuation of \$175,00 for every mile, and the State of Nevada has only \$700 per mile valuation. If you assess at \$3 a thousand you have \$2.10 per mile for Nevada, where the same tax in the State of Massachusetts will produce \$600 a mile.

The city of Chicago and every other city in this country has been made great because of the vast territory which this country covers, because of our great natural resources, which are undeveloped yet to a great extent, and those cities should share a part of the expense.

I believe thoroughly in Federal aid in highway construction, I believe in State aid, and I believe in the sentiments of Mr. Willson and I think a greater proportion of aid should be given to the towns in the town highway work because they return more for the dollar than are returned in either the maintenance or construction work of the State Highway Department, and under such intelligent leadership that the dollar goes further there than in any place else. And I say by all means, especially with all this putting in of State highways on roads that are not the most important thoroughfares, this spending \$15,000 or \$20,000 per mile where \$2,500 would do just as well, put the money under the direction of

the county superintendent. Now you get the authority just as close to home as it is possible to get it, spend with good sound business judgment and with good practical common sense and you will get the best results, and I thoroughly hope we will get more money from the various counties to do town work with, and I think it is up to the State of New York to give the towns more and show them how they can get, in the great majority of cases, roads at a lesser cost, that will answer every purpose. (Applause.)

Mr. BALL (of Jefferson Co.)—I would like to get back to the first subject, and I think there are three very important subjects to be considered, but the most important of the three to my mind is that the term of the town superintendent be changed from two years to four years and that we stop the farmer from destroying the work we have already done. I think this ought to be taken care of. I have three towns and I am after two of them pretty hard, and if it is a case of fight those town superintendents will be out of office before we can get them out under the present method of procedure. I think that we should just simply make up our minds to push that resolution and take up State aid afterward.

Mr. WILLSON.—Mr. Ball, I may be wrong about it, but I think the initiative rests entirely with you county superintendents. If you desire the term to be made four years and the other change in regard to the removal, that is a matter entirely up to you county superintendents through your boards of supervisors, and if you will take an interest in this and go to your boards of supervisors and ask them to pass a resolution along those lines for you, there is no doubt in my mind as to what action the Legislature will take. I think that is your remedy. I think that is your relief. I am satisfied in my own mind what the results will be.

In regard to the matter of getting rid of a poor town superintendent, I have had six years' experience as county superintendent and there have been times when if I could have selected the town superintendents I could have increased the efficiency in work from 25 to 40 per cent.—no question about it. During my experience I got rid of six town superintendents, all through resignation. I succeeded in convincing them they ought to resign, which they did.

I think this matter of securing a change in the law lies entirely with you county superintendents. As far as I am concerned, I want what you want, and if you are interested in this and want that change in the law it is up to you men to see that your boards of supervisors pass the proper resolutions along that line and that they are forwarded to the Highway Department in support of a bill making the necessary change.

Mr. CREGIER.— I think it would be a good thing if we could all be furnished with a copy of the bill. It would not entail an immense amount of work and then we would all be working for the same thing along the same lines and we could all introduce resolutions asking for this proposed change.

Mr. HODGMAN (of Saratoga Co.).— In regard to the matter of having twenty-five taxpayers prefer charges against a town superintendent, there are very few towns, I imagine, where as many as that would combine to take such action.

Another thing I want to ask you — in regard to this matter of detour where State and county roads are being constructed and it is necessary to use private lands for detour. In some cases the owners absolutely refuse to allow such use of their lands. Is that matter of the expense of detours on private lands entirely an expense to the town?

Mr. WILLSON.— I am inclined to think, if you have to prepare a temporary road and it is necessary to go through private land, it is properly a town charge. If the State Commission designates some particular road as a detour, why then it is up to them to prepare and take care of it. But if they ask the town superintendent to close a road and the town designates any particular road, I think that is properly a town charge.

Mr. SCHAEFER.— Mr. Willson, I am a member of a board of supervisors and I am going to ask for a little information. You were speaking of providing more State aid to towns for town roads. As I understand it, the towns must raise a certain amount of money before they can get the State aid provided by the State.

Mr. WILLSON.— Yes, an amount which when added to the State aid received thereon the sum will be not less than \$30 a mile.

Mr. SCHAEFER.— But if the town does not raise a sufficient amount? The money in the State treasury belongs to the towns, does it not? We have towns in our county that have not raised sufficient money to receive State aid, and if you provide that they can draw some money from the State and I think perhaps change the law, allowing them to draw this money, they could then put to some use the money which they have.

Mr. WILLSON.— Some progressive towns would probably get greater benefits.

Mr. SCHAEFER.— But we are after those towns which are not progressive. The other towns are up to date and know they need it. The trouble with our town board, with our taxpayers is that they do not want to pay taxes and would not pay the amount of money required for them to get State aid under the present law. What we want to know is how we can get what is coming to us as it is.

Mr. WILLSON.— You refer to the taxpayers. Now don't you really think the fault is more with the town board than with the taxpayer? As a rule, the taxpayer is pretty reasonable. I have had quite an experience — as I was supervisor for a number of years — and I have gone home with a tax decimal of 60 and 120. One seemed to be just as satisfactory as the other.

My taxpayers did not find fault providing there was something to show for the expenditure of the money. If we thought it was necessary to raise money to do a few things we went to work and raised the money. Occasionally, if I came across a large taxpayer in the town I talked with him, told him here was a certain condition and something ought to be done, and I did not think it was out of the way to ask his advice, and he would say, "Certainly, go ahead and do it," and it was all right.

I think the greater trouble is with the town board and not with the taxpayers. The town boards need a little more back bone and if they will say, "We need these things and they ought to be done," the taxpayer will not find any fault.

That is something we have done — figured out the limit which each town is entitled to, the maximum amount they could receive,

and a letter will go out again this fall to all town authorities calling attention to that fact and I am in hopes that we will get results. I might say that within the last year the increase in the amount of State aid the State was called upon to pay in 1914 over 1913 was approximately \$100,000 — a little over, as I recall it. It shows they are gradually coming along up the line. One county I recall is receiving this year something like \$10,000 more than last year, and I think it was largely brought about through the letter of instructions calling attention to the fact that they were losing money through not raising money.

My own idea as to additional State aid was that possibly we might have it apportioned and go into the towns, much as the method is to-day. You know every fellow who has anything to do with roads has a bug of some kind or another. I have a bug for additional State aid along this line. What I would like to see done is a section of law enacted which perhaps might provide, on about the same basis as your Higby-Armstrong law, that the expense be divided, 50, 35 and 15, between the State, county and town, with a limitation on the amount the State should pay, possibly not to exceed \$1,500. That would bring us up to the point where, if we could spend \$3,000 a mile we could build a satisfactory road that would meet conditions just as well as a road that cost several times that amount. I would want that to come in a little different form than present State aid. I should want the county or town to lay out a system and file a map showing the road on which they propose to expend this money, and that road must be a continuation of some kind of an improved road or a connecting link to other improved roads, and then have that work done under the supervision of the county superintendent through the town superintendent, with certain needful regulation from the State to protect the amount of money the State puts in. And I believe if we could get a law of that kind worked out the results we should get would be satisfactory and that we would be able to accomplish a lot in the building of that class of roads.

As to the question of maintenance, I have not got to that — I am not just positive as to how that would want to be worked out. We might provide for a limitation of maintenance for that particular kind of road in a moderate way, but I think that if we

build it we must insist that it be maintained. That is the mistake. We must insist that they be maintained and we must make provision for that.

Mr. NOSTRAND.— I agree with you in the main. We need additional State aid, but I think the aid should all be devoted to extensions of improved roads or to main roads. The town needs roads as well as maintenance and it is my opinion that additional State aid should be also used for extensions or connections.

Mr. WILLSON.— That was what I meant — connections.

Dr. GALLAGHER.— It is my opinion that there is a very great inequality in the taxation for the small towns. Now we take one town in the county and they raise a rate of \$1 or \$2 per thousand. The next town beyond them up among the hills has got twice as many miles of road and they have got to raise \$3, \$4, \$5 and as high as \$6 to have money enough to get State aid and make that town on an equality with the other. Now it seems to me that when you tax the city to build town roads that you should change the amount of money paid to these small towns with a great many more miles. A town with 150 miles should have more money in proportion than the town with only 50 or 60 miles. One town in this county raises \$2, or a very much lower rate than some of the other towns. Still these small towns do not get as much money as the other towns, and these small towns are the feeders of the large towns and the feeders of the State. Now we don't want a \$10,000 a mile road; a \$4,000 or \$5,000 a mile road, or even a less expensive road, would be just what we would want for feeders to the main road. If you can find some way to give assistance to those small towns you will have the farmers bringing their produce into the city and all over the main lines throughout the State.

Mr. WILLSON.— Doctor, you understand there is a difference at the present time, under the present Highway Law the small towns are given an advantage. You know the State aid as distributed is based upon the assessed valuation per mile. For instance, the State aid is on a graded scale. For the town with an assessed valuation of less than \$5,000 per mile, they receive dollar

for dollar, and so on down — between 5 and 7, 90 per cent., between 7 and 9, 80 per cent., between 9 and 11, 70 per cent., between 11 and 13, 60 per cent. and over 13, 50 per cent. So you see the small and poor town does have an advantage. It is a pretty difficult matter to adjust this so that exact justice is done in each and every instance. At the time the law was enacted this plan was adopted as being the most equitable of any which had been advanced and the experience of the years that it has been in operation shows that the framers of that law were pretty nearly right.

Mr. BUCK.—In regard to the point that the supervisor raised regarding the matter of taxation. Now that is an important point, and speaking from a good many years of experience in the department I can say that Mr. Willson is strictly right when he says that it is the supervisors and the town boards that object to the taxation and not the taxpayer. Now to illustrate this I want to tell you a little instance which happened last winter when the estimates for the highway funds were being prepared in the counties throughout the State. I had a little encounter with a personal friend of years' standing who was supervisor of a town in an adjoining county. I had known this man for years. When his estimate came in it was cut down to the bone; the taxes were reduced to the last possible cent that would allow them to receive State aid at all. This was in an agricultural town. Nine-tenths of the valuation was in farm property. I sent that estimate back to the county superintendent asking for an explanation of why the highway fund was so reduced. He came back with a letter enclosing a letter from the supervisor stating that his people were groaning under the burden of taxation and that same old story, heard so many times. I figured his rate of taxation on the amount which he had provided in his estimate. I figured the rate of taxation on the amount which he would be required to raise in order to earn the last cent of State aid which his town could receive. I put that in exact figures as applied to a farm of \$1,000, \$2,000 and \$3,000 valuation, in that county they assess at half value and I knew \$3,000 would cover practically every farm in his town. I wrote him a personal letter (he had been a warm friend of mine for years). Now, I said, "I know that this taxation

cry is yours and the town board's, not the taxpayers. I have given you the figures which a farmer paying taxes on \$1,000, \$2,000 and \$3,000 would be required to pay in order to earn the last dollar of State aid which your town could get. Now then, if your estimate comes back here providing for the largest amount of tax on which you can receive State aid, I should be pleased to receive it. If it does not come back providing the largest amount of State aid that you can receive, this letter will go to every paper in your town and to all the prominent papers in your county." In just time for the mail to get to his town and back that estimate came back approving the larger amount. That is the answer regarding taxpayers. It was not the taxpayers. It is the town boards trying to whittle down to the last cent and throwing dust in the eyes of the people and then saying, "See what we have done!" whereas they should say, "See what we haven't done!" (Applause.)

MR. RICE.— I would like to ask this question in regard to the Workmen's Compensation Act: Does the town board or the town have to protect their workmen under that act?

MR. WILLSON.— Mr. Rice, that matter has not fully been decided. Anticipating that just such questions would come up, we have written a letter to the Attorney-General asking for a ruling and an opinion on that particular question. I might say that there is some difference of opinion in regard to the point as to whether a town is a political subdivision or whether they must carry their own insurance. There is not any question but what some of the men working on highways in the towns come under the provisions of some of the sections of that law, and I think the towns are liable, but in all probability when we get back to Albany we will have a communication from the Attorney-General on this subject, which will be sent broadcast to all town and county officials just as soon as possible. So far, we are unable to answer the question; we do not know.

MR. LOUGHRAN (of Ulster Co.).— For the benefit of the gentleman, I might say that the City of New York is doing millions of dollars worth of work in the county where I live, from which they

anticipate getting a revenue. They are also running in the City of New York a municipal ferry, and this very question was taken up with the Attorney-General, as to whether the City of New York should provide insurance for its employees, and it was brought out that any employer, be it personal or municipal, receiving any money for profit or gain, should provide insurance, and that came down to this, that the department of ferries would have to insure their men on the ferry boats, the board of water supply would have to insure the men in that department, but the Highway Department, which receives no revenue, it seems is exempt, and I believe the same condition would exist in the town highway bureau, where you are neither receiving nor giving any profit in the direct work itself.

Mr. KARG.—I am going to ask a question in relation to State aid on town highway work. Now ought it to apply to counties where we build county roads under section 320? My county is constructing a piece of road under section 320 that will cost from \$7,000 to \$9,000 before we get through. Wouldn't it be a good idea to amend this section so that it will apply to this class of work?

Mr. WILLSON.—Of course, a road built under section 320 does not really constitute a county road. According to the definition in subdivision 3 of section 3 of the Highway Law, a county road is a road that is built at the entire expense of the county. Now that question has been raised as regards State aid for roads built under section 320 and the Comptroller has, I understand, refused to pay State aid on roads that were built under that section, but they do pay 50 per cent. of the maintenance on roads that were built and completed under section 178, which were built at the entire expense of the county. Now it might be possible to get that changed by an amendment so that State aid might be provided for the maintenance of roads built under the section you speak of. That would require a legislative act.

Mr. KARG.—I think it would be a good thing to have that brought about. It would encourage counties to build roads under section 320.

Mr. WILLSON.— The same rule applies to that as applies to changing the office of town superintendent, that is, to demonstrate and show to somebody, by resolution, that there is a demand for a certain thing to be done, and then you have a starting point. I think that is the way to handle that. You are the people interested and it is naturally up to you.

Mr. COREY.— On the question of State aid I want to register my vote. I believe that State aid ought not to be given as a charity but as a reward for good work and that the town which has not performed its full duty ought not to have any State aid.

Mr. SCHAEFFER.— A certain amount of money, the State's share, is each year apportioned among the different counties for town highway work. There are a lot of towns in the State that do not avail themselves of the opportunity to get maximum State aid. There is a certain amount of money left over each year, isn't there?

Mr. WILLSON.— Not left over, but there is a certain amount which the towns should earn but do not.

Mr. SCHAEFFER.— Now, is there any possible way that the counties can get the money that is not taken up by each town getting its maximum share?

Mr. BUCK.— The maximum amount each year is made up of items composed of the earnings of the individual towns. There is no residue, but here is the way that the money is appropriated.

You understand, to begin with, that this is an appropriation made annually by the Legislature. There is no contingent fund to draw from. Now annually 934 towns raise a certain amount for highway purposes. That requires on the part of the Legislature an appropriation sufficient to cover the State's share of that. Now if a larger amount had been raised, that is, the maximum amount which each town had been entitled to, the Legislature would have been called upon to appropriate from the general funds of the State a correspondingly larger amount as State aid. State aid is limited to \$25 per mile for each mile of highway.

Mr. SCHAEFFER.— Isn't that already appropriated?

Mr. BUCK.—Appropriated only after it is determined how much is necessary.

Mr. SCHAEFFER.— I was wondering whether a town could get the extra amount of money and use it.

Mr. BUCK.—As a matter of fact that is approaching each year more closely to the limit. The annual increase for the five years since 1909 has been almost exactly uniform. It runs from \$125,000 to \$150,000 annually, and we are getting very close to the limit.

Mr. COOK.— We have been discussing a subject dear to my heart, the matter of highway system. I think that every man in this audience cannot help being enthusiastic and truly say that the highway work has improved in the townships at least 500 per cent. since we have placed the town work under the jurisdiction of the superintendent of highways in the various counties. I urged the legislative committee at the time this Highway Law was made that they go one step further and entirely abolish the office of town superintendent of highways, abolish the town supervision, substituting in its place the county. They were afraid to do that because they were afraid that the law would not receive the support of the people, and we all realize that the laws are ineffective unless they are supported by public opinion. They thought they were taking as long a step as it was safe to take at that time when they changed the system of payment of highway taxes throughout the entire State, and I am inclined to think their judgment was correct, but it seems to me that the time has now come when we can put into effect the principles that were laid down by the town board of Erie county. The town as a unit for highway work is too small. We have come to the time when it has got to be attended to in the right way, when it requires skilled men to do the work.

Now, I suppose that you gentlemen will be perfectly astonished at the next proposition I am going to bring out, and that is the enormous waste in this State through the purchase of unnecessary machinery to stand beside the road. Under the present system every township ought to be equipped with machinery costing ap-

proximately \$10,000, and the appropriations of the county are not large enough to warrant the purchase of machinery which would be left eleven months of the year standing beside the road rotting and rusting.

Now, gentlemen, the way to get rid of inefficient town superintendents is not to have town superintendents. The management of the highways in the counties should be placed in the hands of the county superintendent and he should select his assistants and organize his whole system throughout the county.

If you have that system it will enable you county superintendents in the spring to organize gangs of men and keep them busy during the season, and you will get better work. The contractors who are successful are the men who constantly have work and who keep a trained force, and the men who are making money keep their trained men on the payroll whether working or not.

Now, I want to say one word further — in regard to State aid. I agree with the county superintendent of Herkimer county. The worst thing that can be done to anybody is to give them something they have not worked for, and the towns that are not willing to help themselves ought not to be helped by the State.

I thank you very much.

Mr. WILLSON.— Our time is getting short and I have a meeting to hold with the town superintendents and supervisors of Tompkins county. I don't really like to call this meeting to a close because we are getting a lot of interesting things here.

I am keenly disappointed at receiving the following telegram, which I will read. (Reads):

“ Important business matters that have arisen today prevent my being at your meeting tomorrow. Will you please express to the county superintendents my regrets at being unable to be present. I wish you would also urge their active co-operation in every way in connection with the building of our State and county highways and to keep us fully informed of any matters in their counties that are not going properly in connection with either the maintenance or construction.

“ JOHN N. CARLISLE.”

I suppose all the matters we have been discussing here in regard to legislation should properly be referred to the legislative committee, and that committee will be called to meet some time after the first of November, prior to the convening of the Legislature. I think it should be a good thing if somebody would move that all these matters which have been discussed be referred to that committee, and in addition to that, if any county superintendent, or anybody, has suggestions to make with regard to legislation, if he would write a memorandum in to the department it would be referred to the legislative committee when assembled. I think perhaps it might be well for somebody to make a motion.

Mr. NOSTRAND.—Would the committee report to the county superintendents before taking action?

Mr. WILLSON.—On any matters concerning which there was disagreement they probably would.

Mr. NOSTRAND.—I want to say here I am only county superintendent, but am also a member of the town board and my experience as county superintendent has been short. The town man is a local man and responsible to his town for good work. Now there may be places and undoubtedly are places where these men have not done good work and should be removed, but to take that power, which now rests with the town board, and put it into the board of supervisors, centralizing the power, will certainly with us meet with great objection. We want to have the say ourselves. That lies with the town board and it is for us to say. As to the matter of expenditure for the payment of the town men, that does not come out of the highway funds but is paid separately by the town.

Mr. WILLSON.—I think I get your meaning. No action has been taken on Mr. Cook's remarks and no resolution adopted.

Did I hear a motion to refer matters to the legislative committee?

Mr. BRENNAN.—I desire to make a motion that all matters discussed be referred to the legislative committee.

Motion carried.

Mr. WILLSON.—Gentlemen, Mr. Cole has an announcement to make.

Mr. COLE.—Right after we leave this room arrangements have been made by a photographer to take a group picture out in front of the court house and I hope you will not disappoint him and try to look pleasant. Also, our local town superintendents and supervisors will meet in the supervisors' room for a conference with Mr. Willson and after lunch you will take cars at Ithaca street for the campus at two o'clock. One other thing—after you have your pictures taken, as you come back through the lobby of the court house, please register.

Mr. WILLSON.—A motion to adjourn is in order.

Adjourned.

AFTERNOON SESSION.

The county superintendents and visitors to the Conference proceeded informally to the grounds of Cornell University, where they were received by various members of the faculty and of the State Agricultural School and Experiment Station and were shown through the various buildings, especial attention being given to explaining the work and methods of the Agricultural Experiment Station.

EVENING SESSION.

Hon. CHAS E. TREMAN, presiding.

Mr. TREMAN.—*Ladies and Gentlemen:* It is a source of sincere regret to me, as to you, that Commissioner Carlisle at the last minute was detained in Albany and unable to come. He had expected to come as late as last evening, but matters in connection with the letting of contracts to-day arose which absolutely forbade his leaving Albany and he desired me to express to you his regret that he is unable to be here.

Something over three years ago, very much against my will and judgment, I was catapulted into the Highway Commission through the efforts of my friend Blauvelt and other members of the Legislature by the so-called Murtaugh-Blauvelt bill, which provided for a commission composed of the Superintendent of

Highways, the State Engineer and the Superintendent of Public Works. I felt then, and, I think time has shown, that both the State Engineer and the Superintendent of Public Works had all the business on their shoulders they could look after without the addition of any highway work, but notwithstanding this fact the labors came to us, and I devoted a good many months at that time to securing a smattering of highway knowledge. Having been in the Highway Department not long enough to master it, it was long enough to learn how little I knew about it, and, probably to-night you practical men will say the longer you are in the highway work the less you really *know* about it, because it is experimental even to-day.

There are two distinct divisions of the highway problem of the State of New York, the so-called Improved roads and Town roads. You all know, of course, that we have approximately 85,000 miles of road and that the most we can hope for is to have about ten or twelve thousand of those improved in the sense that most people mean by improvement, and, it is on those 12,000 miles of road that all of the discussion, vituperation — and, I might add many other terms — have centered during the past three or four years.

We have heard much about the graft in the building of these improved highways. It isn't my function to discuss that phase of it; it is in the hands of the district attorneys and courts of the State, and if there has been graft in the building of roads I think every honest man in this room, in the Legislature and in the State hopes it will be punished.

The practical man believes that most of our troubles in the improvement of highways have come not so much from graft as from ignorance. To my mind, waste and extravagance in the building of highways for the past five or six years are better terms than graft; "waste," because we have built a great many ten or twelve thousand dollar roads where we should have built twenty-five thousand dollar roads, and much of the amount expended has not stood the traffic but wore out, and was, therefore, wasted; "extravagance," because in other cases we have built the same ten or twelve thousand dollar roads where a three thousand dollar road, such as are being built to-day in Franklin county, would have answered every purpose and would have been just as good for the traffic requirements.

We have gone ahead on this problem, as I have said many times publicly, in the wrong way. If the so-called Hooker Highway Commission had appropriated five million dollars before they built a mile of macadam road and had taken over the eight thousand miles of road which were on the map at that time, and, put, say \$500 per mile in grading, draining, putting in proper culverts, there would have been a great many miles in that eight thousand miles which no one with common sense would ever have suggested afterward should be further improved. But the time has come now, just as the Commission on which I had the honor to serve knew it would come, that when we try to build a cheaper type of road in places where the cheaper type really would answer, the answer would come, "They have a limestone road a mile east of us; why should we have a cheap gravel road?" The people will never now be satisfied with cheap State built roads. These can only be built by the counties or towns.

In building all these improved roads it seems to me we have one great danger, which I hope you with your great interest in the Highway Department will watch, and that is that we are not even yet building for the requirements of the future. When the Hooker Commission started to build roads they built them to take care of horse-drawn vehicles with an occasional automobile, and let many contracts on that basis. When the automobile came to the height of its popularity, about the time that our Commission went in, we found that the roads they were building would not stand it, and the Highway Department has since 1910 been trying to find the road which will stand auto traffic, but now that is not enough. We are to face in the future motor truck traffic, and I fear by the time they have found the road that will stand the automobile they will find it is not heavy enough for auto trucks with heavy loads and with heavily loaded trailers.

When I was Superintendent of Public Works a complaint came to me one day from the city of Cohoes. An auto truck had gone through a canal bridge, and the very irate head of the business owning it called us up and threatened us with all kinds of damages because his truck had gone through our bridge. A man at once went over there and upon investigation he found that this particular truck was loaded *with thirteen tons*. That is the kind

of traffic you are to have on your State highways between the cities. A couple of years ago just outside of Utica I saw a contractor who had a large automobile truck and behind were hitched four or five trailers, heavily loaded with materials which he was drawing over that thin surfaced macadam road. The road was not built to stand that, and I fear many roads we are building will not stand that traffic when we have come to it as we surely will.

The other branch of the road problem, Town Highways, after all, is the problem that comes home to you and to every other man interested in good roads. I personally have been very much interested in the experiment which Franklin county made, as that bill was passed by the Legislature at the time I was in Albany, and I believe that in the end work along such lines may tend to solve the question as to how we are going to take care of the 75,000 miles of town road scattered over the State of New York. It is not boulevards we want; we want market roads, so that the farmer can come in over these market roads and bring his produce to market and take back his goods from the villages. That is the problem you are working on day by day and I believe it can be solved with a comparatively small expenditure of money.

In this county there was a road over in one corner — one of the very poor pieces of road, to my mind, of the county, and in 1911, under the Department of Town Highways, was expended \$496 per mile on that road. I have since that time been over this road at eighteen miles an hour in an automobile after *a three days' rain*. Now that shows what can be done with local materials properly used where brain work is applied to surfacing, drainage and ditching. I speak of that as an example of what should be done all over the State, and if I personally were to offer a solution it would be to give the State more power in the handling of our town roads, making the supervision of the town superintendent so that he can be removed if unfit for office. I believe the man who proves himself manifestly unfit, and I venture to assert that there isn't a county in this State where in the last five years some one or more of the town superintendents would not be in that class, should be removed. It should be easy to accomplish this through proper officials, to replace the poor town superintendent

by a competent one, and if the State will take over more of the supervision and control of the town roads and help the poor towns with more State aid than they are giving at the present time, spending less money on some of our high priced roads, it seems to me we would arrive at a solution which would more nearly meet the requirements of the problem. I say this as a layman as I am not an engineer. I am thoroughly interested in road maintenance and suppose as long as I live, when riding, will pay more attention to the defects of the road than to the beauty of the scenery along the side, and believe to-day the road problem to be the great problem confronting the State of New York at the present time.

We have with us to-night a man who, from the very beginning of State legislation in regard to the improvement of highways has been in close touch with it. He was one of the authors of the bill which was passed in 1911 and, while, as I say, I opposed certain features of that bill very strongly at the time, and still believe they were wrong, in general except as to the personnel it was a good bill. He was also one of those who drew the bill under which we are now operating, and I am sure that it will be a great pleasure to all of us to hear from Senator Blauvelt. (Applause.)

Gentlemen of the Convention.—I have yet to learn why I was invited to address this convention of county superintendents. I am not an engineer and I know nothing about the technical construction of highways. I am not a highway contractor and I could not build a public road according to the simplest of plans and specifications. Honest as I believe myself to be, I am confident that if I were to attempt the laying out and construction of a highway my activities in that direction would be the subject of immediate investigation.

But seriously, gentlemen, I am deeply interested in this great public work of highway construction and maintenance. When one considers the vast network of 80,000 miles of roads in this State, and the intimate relation which those roads bear to the State's ten million citizens, the problem confronting the Highway Department as to how best to construct those roads and to

economically maintain them assumes gigantic proportions. The construction and maintenance of the Barge Canal, great as that work is and will be in the future, is in my opinion insignificant in comparison.

Recently I had occasion to examine some of the early statutes relating to our system of highways. During the course of my investigation I became interested in a study of the history of highway legislation and of highway development in this State. I was led back, in the first instance, to the time of the Indians. When our forefathers came here and settled along the great waterways of the State, they found well-defined Indian trails leading from camp to camp, from tribe to tribe, from one great Indian nation to another, and these trails constitute the basis of our present system of highways. For a century or more they were the only means of inland communication between the settlements. The settlers, as they shoved the Indians back, extended these trails and made new trails for common use. As the trails increased in number and importance with the growth in population they early became recognized as public thoroughfares. Voluntary labor was expended in improvements and in maintenance until finally a fixed custom was established regulating the laying out, improvement and maintenance of the more important roads in the different localities. Ultimately these customs became embodied in the written law of the Colony.

The first law providing for a system of public highways was passed by the First Colonial Assembly in 1691. That act provided for the annual election in each town in the province of three "surveyors and orderlies" who were empowered, subject to approval by the justices of the peace, to lay out and regulate such highways as should be established by a majority of the freeholders. Now, that is the first piece of highway legislation we find on our statutes. It was crude but it was a recognition of the necessity for some governmental control over these trails which the Indians had made and which had been used by the early settlers for over a hundred years.

That act was followed in 1703 by another act, and Lord Cornbury, the Governor, in his annual message to the Assembly at that time said, "I wish, gentlemen, you would think of a bill for the

better ascertaining and preserving the highways in this colony." As a result of those few words in the Colonial Governor's message, the Assembly, in 1703, passed the first really comprehensive highway law of the State, and in that law we find a good many of the elements or provisions of the present Highway Law. That act provided generally for the building of roads between towns and villages; it forbade the encroachment upon and the cutting of trees standing along the highway; it regulated the width of roads at from four to six rods; it provided a means for settling disputes as to highway boundaries and directed the abutting owners to clear and repair the roads. Jurisdiction over the highways was given to commissioners elected every three years, who annually reported to the county clerk. While this act was enacted for a period of three years only, as a matter of fact it was triennially continued down to 1713, when it was re-enacted as a general law of the colony.

It is interesting to note that in 1708 the first provision is found for an assessment of labor for highway work. We all know what that system was. "The inhabitants or their servants were ordered to work and labor not exceeding six days" on the roads, and in the act of 1713 they were obliged to bring spades, crowbars, pick-axes and other materials with which to do their work. For more than two centuries that crude system of working town roads remained in our statutes.

Following a recommendation of John Jay, the then Governor, the Legislature of 1797 passed the first general highway law under the State government. It provided, among other things, for the appointment by the Governor of three county superintendents and for the annual election in each town of three commissioners and as many overseers of highways as there were road districts in the town. It prescribed detailed regulations for the laying out, construction and maintenance of the roads under the direction of the county superintendents. Every male citizen was subject to an assessment for work on the roads for not less than one day nor more than thirty days, with a commutation of work assessment at the rate of forty cents a day. The act also provided that thereafter all wagons should have a width of track of five feet. And at or about that time was passed the first law regulating the

passage of vehicles on the highway — the law of the road in a sense.

From 1708 down to 1873 all work upon the highways of the State, outside of cities and villages, was performed by the owners of property lying in the respective districts, the number of days' labor to be performed by each being assessed against him in proportion to the value of his property. This system became known as the "labor system." In 1873 the several towns were given the option of changing to a money system by which an annual tax was levied instead of an assessment for labor and the money so raised was to be expended in procuring work to be done by contract or day's labor.

The faults — and we all recognize the faults of the labor system — were recognized and the system condemned as early as 1832. Governor Throop, in his annual message to the Legislature of that year, pointed out the superiority of a money system over a labor system in his annual message. He stated:

"Our road tax is now generally looked upon as a burden and is worked out with as little fidelity or labor or regard to time as the law and indulgent overseers will permit. Whereas we sometimes witness operations in repairing highways conducted with skill and local neighborhood pride, yet in most places they are managed without system so that of the work of one year scarcely anything of value remains for the next. If our farmers, in whose hands these roads generally are, could be persuaded of the reasonable assessment and faithfully and judiciously work upon their roads, it would be more beneficial to them than the same amount of labor spent upon their farms; for it would enable them to carry much larger loads in less time and with less injury to carriages and horses to their next market town, and thus raise the value of their produce, and we might expect to see an active spirit abroad to produce a reform in this particular."

These are the very arguments that are advanced to-day.

Governor Marcy in 1834 and Governor Seward in 1839 likewise pointed out the necessity of reform in the method of maintaining the roads; but it was not until 1890 that any real reform

was accomplished. In that year (and to him should be given very great credit) Governor Hill vigorously attacked the existing system. He pointed out the advantages of the contract or money system of maintaining roads over the labor system, and advocated the extension of the money system to cover all towns. As a result of the position taken by Governor Hill, and after the Statutory Revision Commission had reported on the subject, the existing highway laws were revised and consolidated, but the act of 1890 went further than merely to revise and consolidate. New provisions were engrafted in the antecedent law for the purpose of improving the highway system.

From the foundation of the State government the duty of maintaining highways and bridges has been a cost upon the towns and not, as in England, upon the counties. Governor Hill in his annual message to the Legislature of 1890 first called attention in this State to the importance of creating a complete general system of roads to be constructed, cared for and maintained at the expense of the State at large. This system, he said,

“when once complete would enable a person to start from New York City, Albany, or any other point on foot or in a carriage and visit every county in the State, without once leaving the State roads, with luxury, comfort, convenience, pleasure and speed. The roads should be macadamized or constructed of crushed stone or other suitable material with proper culverts, good bridges, adequate drains, water troughs and sign boards so as to compare favorably with the best county roads in other counties; and existing highways could be utilized for this purpose so far as available.”

This is the first we find official recognition in any way of the need for roads constructed and maintained by the State, and it is particularly interesting because it outlines, away back in 1890, the present State road system.

Adopting the Governor's recommendation relative to county roads, a plan, afterward much enlarged, for the improvement of highways was initiated by the enactment of chapter 555 of the Laws of 1890, which provided for the establishment of county roads in certain counties. The act applied to all counties not

exceeding two hundred square miles in area, and authorized the board of supervisors to assume the management and control of certain highways to be designated as county roads which were to be improved and maintained at the expense of the county. The act contained regulations as to the construction and repair of roads including materials to be used, and the work was to be done under the supervision of an engineer appointed by the board. After a road had been constructed or repaired under the provisions of the act it was to become a part of the local highway system and subject to the general jurisdiction of the local authorities.

In 1893 authority was given to all counties to adopt the county road plan. The contract system for working roads was enlarged and counties were compelled to contribute to the towns when bridge expenditures exceeded a certain amount. The principal change, however, consisted in enlarging the highway unit and laying the foundation for later legislation, vesting in the State general jurisdiction over all the roads of the State.

Following the county road law, the "good roads movement" got well under way. Farmers began to realize the importance of better roads. The bicyclist asked for improvements. Delegations annually went to Albany, protested to the Legislature and demanded the construction of new and better roads and better maintenance of existing roads. The result was that in 1898 the Legislature passed the so-called Higbie-Armstrong Act, providing for State aid to counties in the construction of certain county roads. The jurisdiction of construction and maintenance was placed under the State Engineer and Surveyor.

Almost immediately following the passage of the Higbie-Armstrong Act came the demand for a more comprehensive system of State highways, to be built and maintained at the expense of the State. In order to provide funds for that purpose, the people of the State in 1905 authorized the issuance of \$50,000,000 of State bonds for highway improvements. The proceeds of this issue were to be expended under general laws and the road mileage to be improved was to be apportioned equitably among the counties.

Following the adoption of the Constitutional Amendment came the Hughes Act of 1908, which created a State Commission of

three with jurisdiction not only over State roads, but over county roads, and in a sense, over town roads.

So, in the two hundred years following the enactment of the first law, we find our present highway system developed and jurisdiction over the same centralized in the State government under its general police power.

In 1911 a change in the personnel of the Commission was made. The Commission, as it was created under the Hughes Act of 1908, was succeeded by a Commission composed of the Superintendent of Highways, the Superintendent of Public Works and the State Engineer and Surveyor. And then, in turn, last year — 1913 — a third act was passed abolishing that Commission and creating a single-headed Commission.

During the entire period which I have traced England, France, Germany and Holland were building scientific roads. In the nine years from 1660 to 1669 France was building thousands of miles of stone highways patterned after the old Roman roads. In 1775 a new form of construction known as the French system was adopted. Good drainage and systematic maintenance were absolutely necessary. By 1830 most of the great highways of France had been completed. In England, the latter part of the seventeenth century and the beginning of the eighteenth MacAdam was building his type of roads, which form of construction has remained practically unchanged in England since that time. But in this State we were content down to almost 1898 with our old system of dirt roads, built without engineering talent or skill. The matter of culverts and drainage was almost wholly overlooked. There was an absolute lack of official responsibility and competent supervision. Commissioners and overseers of highways were rarely selected on account of any especial fitness for the discharge of the important duties involved in the proper construction of suitable highways or in their care and maintenance.

Our whole scheme of highway construction and maintenance has been evolved since 1898. During the last fifteen years we have seen on our principal thoroughfares the horse-drawn vehicles gradually disappear. Annually we have seen automobiles take their place in increasing numbers. With that increase in numbers there has come year after year the necessity for a higher and

better standard of roads to meet the increasing demands. The type of road which the State built in 1898 would last but a few months on some of the trunk lines of to-day. And yet I have heard the present Highway Department of this State condemned for the present condition of some of the roads that were built ten or twelve years ago.

The Highway Department and its predecessors, the State Engineer and Surveyor, have experimented with all the types of roads to meet the demand. It has built waterbound macadam roads, bituminous concrete roads, cement roads, roads having brick surfaces and roads having asphalt surfaces, with a view of getting a road having the maximum life at a minimum cost for construction and maintenance. And they are still experimenting.

I am not going to talk much longer for I know it is a very warm night. I have, however, a few further observations which I should like to make.

Mr. Treman has spoken of the necessity for a further change in the highway laws of the State to meet the constantly changing demands made on our roads by the automobile users and by the farmers. I think everyone appreciates that the Highway Act of 1908, while good in many respects, was wrong in principle. When the Constitutional Amendment was adopted in 1905 power was given to the Legislature by general laws to lay out a new highway scheme for the State and to apply the \$50,000,000 realized from the sale of the bonds in the construction of highways to be equitably apportioned among the different counties and towns of the State according to mileage. The result was that each year representatives from the counties and towns went to the Highway Commission and demanded their equitable apportionment of roads; and the Highway Department, recognizing these requests for annual apportionment and construction, built here and there disconnected sections of roads to meet local demands.

At the time of the submission of the Constitutional Amendment it was believed that a comprehensive system of 8,000 miles of roads could be built out of the \$50,000,000 bond issue. But in the course of two or three years it was found that, owing to the increasing automobile travel, a much higher standard of road than was contemplated would have to be built. In 1910 the aver-

age cost of county highway construction was \$11,500 and of State highway construction, \$12,500 per mile.

In 1912 the Legislature, finding that the system could not be completed out of the first bond issue and that certain counties, owing to their early activities, had even then received more than their equitable apportionment in road mileage at the expense of other and less favored counties, passed an act for the submission of a referendum to raise an additional \$50,000,000 in order to complete the system and to give those counties which had not received an equitable share of the highway funds further moneys to complete their road mileage. The act provided for the apportionment of this money to counties in proportion to population, to area and to improved road mileage, two-fifths of each county's share to be devoted to trunk line, and three-fifths to county highway, construction. It also provided that the moneys to be apportioned for trunk lines could be used only in building or completing those State highways which had at that time been officially located by the Highway Commission, so that no part of the moneys available for trunk line roads could be used in such additional State routes as might thereafter be created. There was no limitation placed upon the appropriation made to counties for county highway construction.

Soon after the apportionment was made, as provided for in the act, it was found that certain counties of the State would have a surplus of trunk line moneys after their State roads were built for the reason that they had practically built all or a large percentage of their State highways out of the first \$50,000,000. The Highway Commission in 1913 estimated that the aggregate surplus would reach approximately \$4,000,000 and that that amount would automatically go into the sinking fund for the retirement of the bonds at maturity. In other words, the counties of the State would receive for highway construction only \$46,000,000 out of the \$50,000,000 authorized. The Legislature in the case of Warren and Essex counties, where a large surplus existed, has attempted to give the Highway Commission authority to construct additional State highways, but in my opinion the act is clearly unconstitutional.

One point that I want to make is that in the Constitutional Convention which comes next year the highway question is going to be of paramount importance. Not only must means be devised for completing the highway system of the State, but provision must be made in some way for the re-apportionment of the surplus of \$4,000,000 to those counties which did not receive their equitable apportionment out of the first bond issue.

I have one or two further observations to make. Greater power in my opinion should be given to county and town superintendents in the care of local roads. They are the best judges of the needs of their respective counties and towns and of the local materials at command for construction and maintenance. The more important roads may have to be built according to a high standard, but I think that on a great number of roads all that should be done is, as Mr. Treman has pointed out, to take advantage of local materials and to build well-drained roads with proper culverts.

I think too much time and too much money is being spent by the Highway Department in the elimination of grades and the construction of purely straight line roads because, in my mind, the prettiest road and the most pleasing is the one with graceful curves and undulating surfaces, and to-day with the automobile traveling on our roads the tendency of the operator is for speed, and the best check you have is to have as many small curves as possible. They are graceful and pretty, and I would not spend 20 per cent. of the cost of a road in the reduction of a grade from 8 per cent. to 6 per cent. I can point to one of the prettiest roads, probably, in the State that is built in my county along the Hudson river. I recall that it was projected, outlined, surveyed and estimates made during the Hooker administration. The road is about two and a half miles in length and the original estimates called for something like \$97,000 for its construction. Senator Hooker thought the amount available at that time would not warrant the expenditure of \$97,000 for the construction of the road. More than 25 per cent. of that amount was needed in order to get a uniform grade not in excess of 6 or 7 per cent. Upon a resurvey it was found that the cost of the road could be reduced to \$65,000 or \$66,000 by the retention of some of the short but quite sharp grades. The road was built on the reduced estimates,

and to-day we have there one of the prettiest and most attractive of roads.

I believe, too, that shade trees should be placed along every mile of the trunk line roads in this State. The Conservation Commission has at its command, and could furnish to the Highway Commission a sufficient number of trees for that purpose. They could be cared for by the patrolmen on each of the roads. In the course of time they would add to the life of the roads by keeping them moist and shady, and they certainly would enhance the pleasure of travel.

I believe, too, that necessary engineering should be done as early in the season as possible for the following year. Estimates should be made early in the fall in order that contracts may be awarded not later than November or December, and thus give to the contractor an opportunity to assemble his plant, secure his material and be generally prepared for construction work as soon as the ground is settled in the spring. This year, when I had hoped to see highway construction under way in May, it is now well on in June and the contractors are only just beginning to do some work. Two very valuable months have been lost. Contracts could be signed up by December, plants assembled during the winter and materials secured which, in my opinion, would lessen the cost of construction because contractors could keep their plants working during the winter, whereas they now lie idle.

Finally, the criticism against the Highway Department is all wrong. The charge of graft is unjust and unfair. Only a week or two ago in my own town an erstwhile governor of this State made the statement that of the first \$50,000,000 bond issue \$35,000,000 had been lost in graft, while only \$15,000,000 had been expended on the roads. Through such exaggerated statements the impression goes abroad among thoughtless people that the treasury of the State is being constantly looted by a gang of highway grafters. You know, and I know, that such is not the case. The Highway Department of the State has already completed 6,000 miles of road and has 1,200 miles of road under construction,—a mileage greater than in any other state in the Union; in fact the improved road mileage of the State of New

York equals, if not excels, the road mileage of any country in the world.

I hope that when you county superintendents go back to your localities you will do everything you can to disabuse the minds of the people that this road proposition is full of graft. Who in the Highway Department is receiving the benefits of the graft? I have been in touch with the Department and I have not seen anybody that appeared to be benefiting from graft. I do not believe that any of the contractors, and I know a great many of them, have grown rich and are rolling in wealth because of highway contracts made by them. I find just the opposite. Many of the contractors of this State have gone out of business because they were unable to make a profit on contracts under the estimates of the Department. Then too, many good builders of roads have retired from business because of unjust criticism; and I do not think that any one of them has grown rich. There undoubtedly has been waste due to the development of highway construction; but I believe that our Highway Department and contractors have been doing their very best to meet the problems confronting them.

In closing I wish to say that I am not only interested in the highway situation in my own county, but am deeply interested in the highway situation throughout the State; and if I can be of service to you county superintendents should I be returned to the Legislature this year my services are at your command as well as the command of my own district. (Applause.)

Mr. TREMAN.—I am sure that we have all appreciated this statement of the legal history of the road situation. On behalf of Senator Blauvelt and myself, I wish to thank you all for the close attention you have given to us on this hot night.

In closing, let me urge you, representing as you do all the counties of the State of New York, as you go back, to take with you this message from one who has had only a short experience in public life, but enough to see something of it and, to realize that men in politics, I do not care what party they are in, average in honesty, integrity and a desire to serve the State, just as highly as the men who walk up and down the business streets here. (Applause.) In speaking of the highway situation of the State

we are talking facts. The men occupying positions of trust in the Highway Department are as good and as honest men as you will find anywhere, and, I am willing to give them credit for honesty and a desire to serve the public. I tried myself, and, I believe you are trying, to fill well your places in your own counties, just as I tried, and, I believe the average man in Albany is endeavoring to do the same.

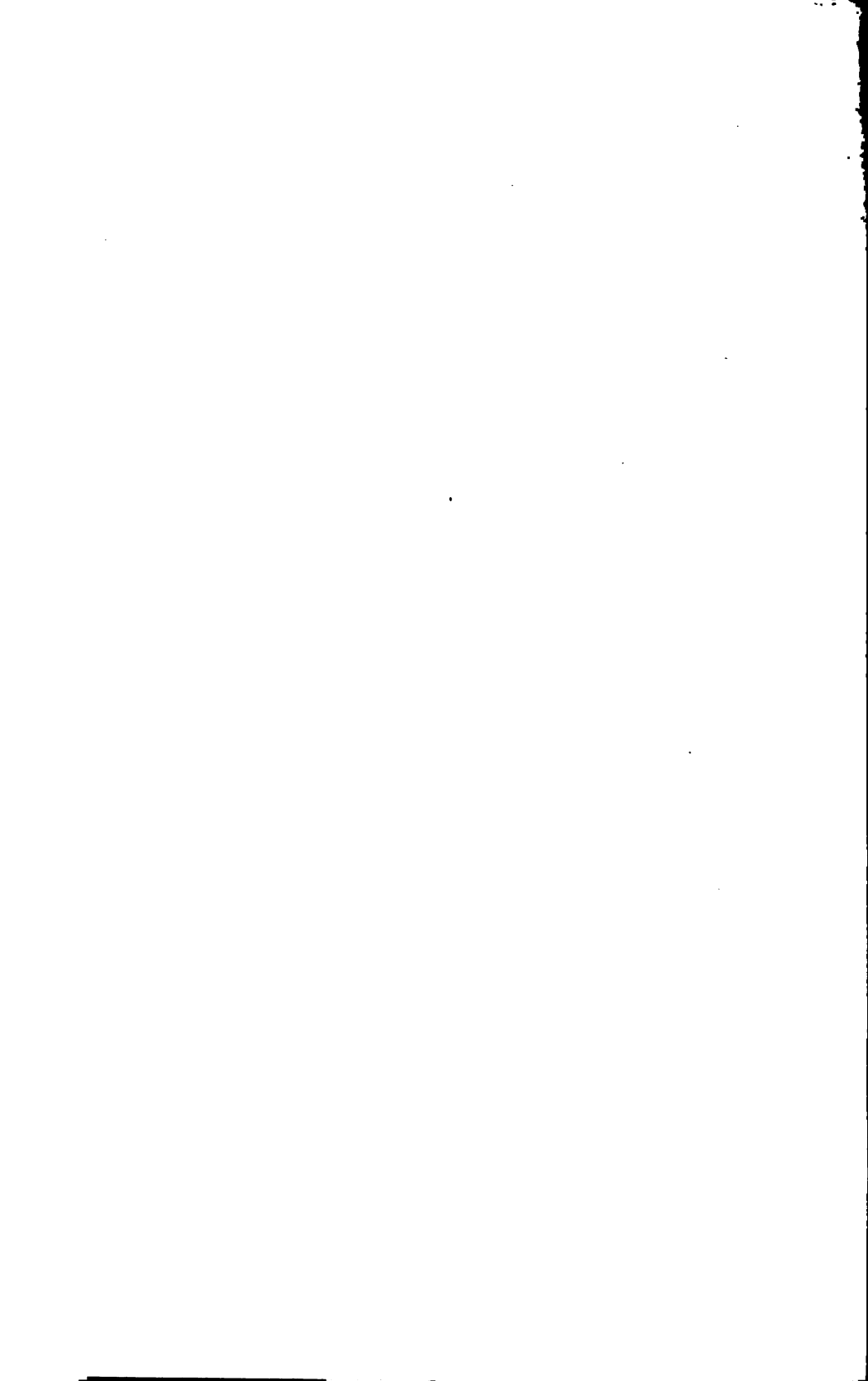
I speak strongly because I have good friends in all parties, and a number of them in different parties have been criticised, and, I say it is just as unfair to one as to the other, because don't think that the honesty of this great State of New York is confined to any one party. The people of the State, whether Democrats, Republicans, or what not, are anxious to do what is right, and I hope that each of you, as you go home, will be a missionary trying to convince the public that the men in office are just as honest as the men in the business street. I am in a business where we employ a trifle over a hundred persons, and there is not a year goes by but what we find somebody or other more or less dishonest. Now I assume that that proves that about two per cent. of the public are dishonest and the other ninety-eight per cent. honest. Now we are going to find that in politics. You hear about the man who steals ten dollars, but you don't hear anything about the other hundred and ninety-nine who don't.

This is not road business, but closely allied to it. If you will take that thought home I will feel that I have been well repaid. Let me repeat, if you will only impress on the people in your community that the men in the Highway Department, the men in the other departments in Albany, in the Capitol of any State, are trying just as hard as you would and just as honestly as you are in your place, you will have taught them a mighty good lesson. And believe me, ladies and gentlemen, if the people don't learn that soon you will find that there will be mighty few men who will be willing to stand up and be targets. That's just what it is — targets. It is coming close to the time when the majority of men will refuse to take positions in the public service. Why was it that Governor Glynn had to ask a dozen men — and, I could name quite a good many of them — ask a dozen men to take

a position in Albany, a position at \$15,000 a year on the Public Service Commission. It was not because it was not a good salary, it was not in most cases, because they were earning that much when he asked them to take the position, but, they did not care to subject themselves to such public criticism for what reward there is in it. Just as soon as the people realize the injustice of unfair criticism, the State of New York will be able to command the services of the best citizens for public office at all times.

Having delivered this little sermon, permit me again to thank you for the close attention you have given during this meeting.

Adjourned.





STATE OF NEW YORK
DEPARTMENT OF HIGHWAYS

PROCEEDINGS

OF THE

TWELFTH SEMI-ANNUAL CONFERENCE

OF THE

STATE COMMISSION

AND

County Superintendents of Highways of
the State of New York

UNDER THE AUSPICES OF THE

STATE DEPARTMENT OF HIGHWAYS

AT ALBANY, JANUARY 19-20, 1915



ALBANY
J. B. LYON COMPANY, PRINTERS
1915



STATE OF NEW YORK
DEPARTMENT OF HIGHWAYS



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**PROCEEDINGS OF THE TWELFTH SEMI-ANNUAL
CONFERENCE OF THE STATE COMMISSION
AND COUNTY SUPERINTENDENTS OF
HIGHWAYS OF THE STATE
OF NEW YORK.**

Meeting called to order by Deputy Commissioner Walter F. Willson at the office of the Highway Commission, Albany, January 19, 1915, at 10:30 A. M.

MR. WILLSON.—Gentlemen: I believe this is the twelfth semi-annual conference of county superintendents to be held, and I wish to take this opportunity of thanking each county superintendent for the hearty cooperation and assistance he has rendered the department and I also want to congratulate you on the results you have been able to accomplish in the improvement of town highways throughout the State.

You might be interested in knowing that during the past year 454 miles of town macadam road have been constructed, the cost ranging from \$1,200 to \$3,000 per mile, the variation in cost depending on several things, such as availability of material, the width and depth of metal necessary to construct a proper road, and things of that kind that enter into construction cost. There have also been constructed 389 miles of gravel road, the cost of that ranging from \$900 to \$2,000 per mile, the variation in cost depending on the same things that enter into the cost of macadam. The total amount of money expended on this class of improvement amounts to \$1,066,688. This brings the amount of permanently improved town highways in the State up to approximately 10,000 miles of stone and gravel road. Seven thousand two hundred and twenty-one concrete culverts have been built and 6,629 cast iron culverts have been placed, making the total permanent culvert construction during the year 13,850 culverts. This, to my mind, is a very creditable showing and you men are entitled to credit for the work accomplished.

I do not know what I can say to you that would be of special interest to you, because anything I might be able to say has been

said so many times. Yet I believe there are one or two things that are absolutely fundamental and necessary in order to accomplish the proper results, and I think one of the most important things, perhaps the most important thing in our part of the work is more attention along several lines, particularly along the line of the education of the taxpayers in the matter of the town superintendent's estimate, which is the fundamental instrument of the town highway system. If the town superintendents and the members of the town boards fail to perform their duty by neglecting to provide sufficient funds under each of the items of the annual estimate, the result will be that very little work of a permanent character can be accomplished during the year. I think that is the thing that needs your attention in the first instance.

Section 90 of the Highway Law provided that the town superintendent shall, on or before the thirty-first day of October, make the estimate and file it with the town clerk, to be presented by the town clerk to the town board at its annual meeting on the Thursday after election. Section 91 provides that the members of the town board shall on that day consider the estimate for approval, and they may increase or reduce the amount of any of the items contained therein, subject to the limitations provided by law.

Item 1 of the Estimate.—This bureau has established a practice of furnishing each town with a statement of the percentage of State aid to be received for the following year. The table also shows the minimum amount of tax each town should raise in order to receive the full amount of State aid. This data is sent to the county superintendent of highways about October 1st, which allows four to five weeks before action is taken by the town board on the estimate as provided by section 91. The county superintendent is requested to present this information to the town board, also to the taxpayers within the various towns of his county, to the end that each town may receive the maximum amount of State aid to which it is entitled. The town officers should compare the amount which it is anticipated to levy for Item 1, with the amount necessary to be raised by tax in order to receive the maximum amount of aid from the State as shown in the table. For the towns which failed to meet the requirements in order to receive the maximum amount of aid for the present year, an average of less than twenty cents additional tax on each \$1,000 of assessed valuation would have been sufficient to bring the tax up to the necessary amount.

We find there are numerous transfers of money made by resolutions of the town boards from the various town funds to the highway fund. In many instances the towns are losing State aid in following this practice. Such transfers appearing under "Receipts," the towns are not entitled to additional aid, whereas, if the town superintendent's estimate had been given more attention and the amount to be levied for highway purposes raised, the town would have received an increased amount from the State. The law provides that the State shall pay a graduated scale of percentage on the amount levied and collected for the improvement and repair of highways. Now this matter is important and should be given consideration by the town boards before the time expires for the approval of the estimate, as it is the starting point of what it is proposed to do the year following in the way of road improvement.

Item 2.—The bridge matter in the towns is becoming more serious each year. We cannot expect that all of our bridges can be constructed in one year any more than we can expect that all our town highways can be permanently improved in the same period of time. However, the town superintendents should make a careful estimate of the amount required to rebuild some of the unsafe and ancient bridges in use at the present time. When we consider that the State of New York is contributing a hundred million dollars for the construction of State and county highways and an average of over five million dollars each year for the maintenance of State, county and town highways, it would seem that more attention should be given to the bridges so that they may meet the character of traffic which our highways are constructed to carry.

The amount of taxes raised for bridges, as shown by the estimates of the town superintendents during the year 1914, averaged \$815 for each town in the State. This tax is levied against the taxpayers of the towns, including incorporated villages. We realize that some of our towns have a low valuation which makes it appear a burden to bear the expense of bridge construction. The amount of tax raised by the taxpayers, exclusive of incorporated villages, for the improvement of town highways on which State aid was paid during the year 1914, averages \$3,260 for each town aside from their share of taxes raised for bridges and other purposes. It is therefore believed that more consideration should be given to this item so that the town superintendents may

be enabled to modernize our bridges. Money invested for bridge construction differs from the expenditure for the improvement of highways. A bridge built of concrete, as our bridges are being constructed at the present time, will be an asset to the town for years to come. Yet nowadays if a town superintendent proposes to build a bridge of that type at a cost of \$1,500 or \$2,000, or whatever the amount may be, invariably the people say, "That is an expenditure we cannot afford to make this year." Now, gentlemen, really, as a matter of fact, an expenditure of that kind for the building of a bridge of that type should not be classed as an expenditure because it is simply an investment that town has made in that particular piece of improvement and it is not fair that it should be charged to one particular year; it should be spread over the area of years for which the bridge will stand. There is not any question in my mind but what the modern bridges we are building today are good for fifty years or longer, so their cost should be distributed over that period of time. Really, as a matter of fact, it is not an expenditure, it is an investment. It is not always an economy not to spend money, in a great many instances it is an economy to spend it, because as the traffic conditions have increased, and with the improved system of roads that we have, every year the per-ton load is increasing wonderfully and where the bridges are not taken care of it strikes me that the towns are taking serious chances with the heavy loads that are coming along to go over some of our old type bridges,—one accident might possibly pay for the building of half a dozen bridges.

Item 3.—The necessity of machinery in building roads is an important factor. No town is properly equipped without either a roller or traction engine (and crushers, where a town has available material) to perform work of a permanent character on the town highways. The third item of the estimate provides for such machinery, the tax being levied against the property owners of the whole town, including incorporated villages. This item should also include an estimate for necessary road machines, tools and other implements required for town highway work.

Item 4.—In many towns it is found that town superintendents are unable to handle the snow proposition because a sufficient amount had not been provided by the estimate. This money, however, should be expended as economically as possible as it is the desire of this department that the towns' money, together with the

money contributed by the State, should be expended for work of a permanent character.

A copy of the town superintendents' estimate as finally adopted by the members of the town board is transmitted to the board of supervisors to be levied, and when collected is paid out on written order of the town superintendent for the purposes stated therein.

The clerk of the board of supervisors, in accordance with the provisions of section 100 of the Highway Law, transmits to the State Comptroller and to the State Highway Department a statement of valuations, showing also the amount of the first item of the town superintendent's estimate as the basis for state aid. This statement should be made as follows: The assessed valuation of real property for the town at large as shown in Column No. 1 of the form of report should be identical with Column No. 3, unless the town has within its limits an incorporated village. Soldiers' exemptions are not to be considered in compiling this report. State aid is determined on the valuation as equalized for State purposes. Special franchises should be included in each of the columns showing real estate (the tax law defines special franchises as real estate). Occasionally we have to send these reports back for correction, there being a misunderstanding as to the amounts that should be used. We are calling your attention to that fact in order to facilitate matters and would advise that you keep in touch with the clerk of the board in making up this table to the end that the proper valuations may be inserted in each column.

Section 104 of the Highway Law provides that the supervisor shall furnish the town with a bond before any money is paid over to him. This Bureau furnishes a form of report which shows the amount of money the supervisor turns over to his successor at the expiration of his term of office, this form being signed by both the retiring and incoming supervisors. In determining the penalty of this bond, the amount as shown on the statement of the retiring supervisor, the amount of the four items of the town superintendent's estimate and the amount of State aid are added, the total being used for this purpose. Parties paying over any money to the supervisor before he has filed his bond with the town board are personally liable for any default. Now the supervisor, as a matter of fact, has not any right to receive such money until he has filed his bond, and this is something you should call to the attention of the supervisors. The law says that before the super-

visor shall receive any money he shall file bonds with the town board, and this matter should be given consideration in sending out your notices and bonds to the supervisors.

Section 105 provides for a written agreement between the town superintendent and the members of the town board for the expenditures of highway moneys. The first item of the town superintendent's estimate forms the basis of this agreement. This is the initial form of report, which shows the importance of the town superintendent's estimate. Each mile of highway must be given the necessary attention as regards primary work. If the towns have taken advantage of the aid offered by the State and levied taxes in an amount sufficient to receive the maximum, there will be funds available to enable the towns to accomplish work of a permanent character. The nature and location of such work, with the amount necessary to perform it, is shown in the agreement.

Section 107 of the Highway Law provides that supervisors shall furnish their town boards with a report of all moneys received and expended for town highway purposes for the year ending October 31st. The town superintendent's estimate furnishes the basis for this report. On or about October 1st this department furnishes the county superintendents with blanks to be transmitted to the supervisors for use in making out their annual reports as required by section 107. One of these forms is stamped "Return for Albany Files." This copy shows the balances on hand October 31st for previous year, the amount of each item of the town superintendent's estimate and amount of State aid, together with the amount of any error disclosed by the audit of this Bureau.

On receiving the report stamped "Return for Albany Files" county and town officials should check the amounts inserted by this department. If any of the amounts are not considered to be correct, they should immediately notify this department so that the matter can be rectified before the supervisor presents his report to the town board,—on the Thursday succeeding general election, as provided by law.

The Highway Law makes it the duty of the Third Deputy to supervise the town highway funds. This necessitates the audit of each town highway account by a direct representative of this department. At the close of the fiscal year, October 31st, this audit is immediately taken up by the Bureau of Town Highways. The records at the office of the county treasurers are examined to

ascertain if the amount of the four items of the estimates have been collected and paid over to the supervisors. This matter is given attention before examination of the disbursements is made. The department thus secures a verification of the amounts to be levied and collected which appear on the town superintendent's estimate approved by the town board.

The town superintendent's estimate is given final recognition in the annual report of the county superintendent as provided by section 33, subdivision 6 of the highway law. In compiling the data for this report the amount of permanent work to be shown depends entirely on the consideration given to the town superintendent's estimate.

From the foregoing it will be noted that the town superintendent's estimate forms the basis of each report made in carrying on the town highway system.

Now, gentlemen, I wish you would bear that in mind. It strikes me that this is the important thing because if proper attention isn't given to the estimate, to the raising of sufficient funds to perform this work, and the rest of it, we are not going to be able to accomplish what we ought to accomplish.

Your Executive Committee, appointed at Malone, has arranged a program which we will have to take a little out of order. The Committee has asked Mr. Dayton to give us some information as to prison labor upon town highways. I think this is an important matter and that we will be glad to hear the results Mr. Dayton has been able to accomplish in his county in that class of work. It has been arranged, however, that the county superintendents and the gentlemen present who wish to accompany them should go over to the Executive Chamber at 11:30 and meet the Governor. It is 11:03 now. You will have to leave here probably at 11:20, and I think perhaps we want to be on time over there and that we had better take a recess at this time and go over and visit the Governor because I don't think we will have time to listen to Mr. Dayton's paper and get over there on time. Is that satisfactory to you county superintendents? If so, we will take a recess until quarter of two.

Meeting adjourned.

AFTERNOON SESSION.

The meeting reconvened at 2:15 P. M. and was called to order by Mr. Willson.

MR. WILLSON.—Gentlemen, the Commissioner.

COMMISSIONER CARLISLE.—Mr. Willson and Gentlemen: I am glad you are all down here at this time, and I suppose you want to see me in regard to your roads. I certainly will try and arrange my time so that I can devote as much as possible to you fellows and the delegations in order to talk over your problems. Now there is but very little I want to say to you gentlemen because I think you have got the work of the department down so well that you understand about what we are trying to do and what we want you to help us to do, and I want to assure all you county superintendents that I am very glad indeed to have your cooperation and I want to thank you for the cooperation we have had in all the counties of the State in trying to work out this road situation. I think you are seeing more and more, as you should, that you are really an integral part of the State Highway Department and that you are not only county superintendents in your own county but that under the law you are charged with certain responsibility in regard to this State work and that you are accepting that responsibility, and I hope you will feel that the department needs your aid and your cooperation along those lines and I know if we can have that cooperation probably a lot of the troubles we always have had can be solved. That, of course, relates, as we have said before, both to the preparation of plans and to the acceptance of the roads, and I want to urge you again that when the plans are submitted to you by the Division Office it is not the perfunctory thing on your part to approve them; but you are to look over those plans and if they do not conform to the conditions you think required in that section you ought to be very free to express your opinion and, if necessary, take the matter up here personally, if you do not come to an agreement with the man who designs the road.

And, better than that, we want to have your active cooperation in regard to the acceptance of the road. I have followed through what I told you I was going to do and I have not accepted a road in this State in the last year where the county superintendents refused to sign their acceptance to it, but I have told them all,

whether they were State or county roads, it didn't make any difference, if they couldn't get the local representatives of the people of that county to stand for the acceptance I would not take it — they would have to go to the Court of Claims if they got their money. This cooperation in the preparation of plans and the final acceptance of the road is something that you are legally charged with as a duty, and I feel now that when an acceptance blank comes in signed by a county superintendent I am pretty sure of my grounds to accept that road because you have made up your mind that the road was built according to the plans, if not you wouldn't have signed it.

There are only one or two thoughts I want to give you today in relation to the suggestions I have made in my report. I have suggested — whether my suggestion will meet with your approval or the approval of the people I am not sure — a proposition of bettering the town superintendent's work and my suggestion is that the Legislature ought to amend the law to provide that the town superintendents must be appointed by the town boards but that they cannot receive their appointment until the county superintendent of that county has certified in writing that the men he proposes to appoint are qualified to perform the duties of the office. We cannot, as you know, probably ever have a Civil Service examination for town superintendents, and probably would not want to have because probably a good many men who are in a way illiterate would make good town superintendents; but if we have the appointive power in the town board and do not permit that appointment to become effective until the county superintendent has formally set in writing that this man does possess the necessary qualifications I think you will make a long step in advance in town work.

Then I also recommend that the town superintendents could be removed by the county superintendents upon charges being preferred in writing, the town superintendents being given an opportunity to have a public hearing on those charges so that they could not be thrown out of office without having a chance to defend themselves. You may not all agree with me as to that, but I think it will be a big step forward in your town work if you can know that you are going to have qualified men as town superintendents and that they will be retained after they are appointed for a period of four years. Now I believe in home rule. There have been suggestions that the State Commissioner of Highways

should have authority to remove the town superintendents. I do not believe in that because I do not believe the department ought to be burdened with that work. It might throw a large volume of work upon us. We have enough now without additional work of that character. But you county superintendents who are responsible for your town work, if you had the disciplining of these gentlemen and the right to remove them in case they did not do their work properly, you would have a control over them you haven't got now.

Another feature that I tried last year and could not get a response — and I know I am on the right ground — the great work for the Highway Department in the future is going to be maintenance. We can build these roads all right. As long as we have bond issues we can get money. We can design types of road and I think we can build them now fairly successfully, with very little criticism, and get fairly good results on our new construction, but the great problem is maintenance, and with the roads of this State piling up in mileage until we have practically six thousand miles of State road to maintain, the system of maintenance in some way has got to be improved and has got to be put on a basis where we can take care of these roads in the future and take care of them promptly. I believe this is the solution, to use the town superintendents to do this work, and wherever we have used them in this State we have got very good results. This last year we have used a lot of town superintendents and their equipment, and every time we did it we were money savers and the towns were benefited by getting the money the State paid — although in some way that ought to be improved. By a new arrangement last year we were allowed to use town superintendents and their equipment in the maintenance of State and county highways, and we had this in mind, that in the spring of the year, in the month of April, before the men could get on their town roads we ought to be able to get hold of the machinery and appliances of your town roads and get on our State roads, roll out our shoulders, clean out our ditches and culverts and do minor repair work, and within that month there is not a town in the State but what the town superintendent could do that repair work upon the roads of the State, but sometimes it does seem to us as if it is impossible to get it done even all summer long, and I think it is a matter for discussion and would like to have the views of you gentlemen as to whether it is not feasible. The thought I have had in mind

was to get equipment, because we cannot do this work without equipment. We tried to do it through maintenance gangs of patrolmen, but if they have not machinery, and we cannot rent the machinery, we cannot do the work and we waste time and money in trying to bring about a result which it does seem to me could be brought about very quickly and at a small expense comparatively to what we are paying now and produce better results.

Another thing I know we could work. In my county Mr. Ball proposed a plan that we buy the stone from the town superintendents, and he wanted to crush the stone sold to the State and deliver it on the roads. We bought the greater part of the stone in my county from the town superintendents. Now the result was that we got No. 3 stone, they got the pay from the State for crushing the stone and we have been able to build a number of miles of town road in that county we never could have touched if we had not had that money. With the cooperation of the town superintendents we got the stone delivered just where we wanted it, it did not cost us a dollar more than if brought elsewhere and the town was benefited by that kind of work. That is the kind of cooperation we ought to have in the maintenance. If you will remember one thing, that the improved roads in New York State we are supposed to maintain today would make a single connected line that would reach from New York to San Francisco and from Montreal, Canada, to Miami, Florida, with enough left over to duplicate all the improved roads in Massachusetts and Connecticut, you can imagine what kind of a maintenance problem we have in New York State, for the head of the department to know that the maintenance work is going on properly and that the money is being spent to get the results we should have.

I find the main trouble in the State is to get good men who can do maintenance work and I have been discouraged time and again to go into a county and find a pretty good man, an engineer, but who absolutely lacked the executive ability to go out and hire men and get the work done. Although he had the stone on the side of the road he did not seem to have the ability to get men to put the stuff on the road and it stayed there month after month and every time you go there you cannot see any improvement to amount to anything at all.

I believe we should take advantage of the organization in the town, we should take advantage of the machinery those towns own, and by working together in that way we can do this main-

tenance work. It is about the only solution I can see we are ever going to have. This maintenance is continually piling up; next year it is apt to be a thousand miles more and, if it goes on as now, it will be a thousand miles more the following year; and unless we have some kind of an organization that is systematized the maintenance problem will be troublesome and there will be complaint all about the State. If you let a piece of road a mile long go to pieces they will forget the 5,999 other miles and will damn the department from one end of the State to the other because it does not fix that mile and fix it properly. And in a way they are justified, because the department ought to be so organized that if they will give us the money to do the work that condition will not prevail.

I am very glad to meet all you gentlemen and I hope in the coming year you will feel that the department is friendly and that we want your cooperation and will get it, as in the past, and I think if we can do that the highway work will emerge and we will all feel that the Highway Department is doing good work and we are not being criticized. I don't know as that will ever come — It may in the millenium — but we can at least make a long step forward in that direction. (Applause.)

MR. WILLSON.— Gentlemen, Mr. Ricker has a few words he would like to say to you.

MR. RICKER.— Mr. Chairman and Gentlemen: After Mr. Carlisle has made a speech to you about roads there doesn't seem to be anything left to say, but Mr. Willson has suggested that you might be interested in some of the educational work we have been trying to do in the department.

The cooperation to which the Commissioner refers is educational work between the department and yourselves. The cooperation which we have been seeking to get with the men out on the roads depends upon our understanding each other and upon their understanding the business and knowing the rules of the game. Now the rules of the game are what I am trying to teach the boys. Last year we had two hundred men in this room for two days and they listened to talks by an engineer representing the Cement Manufacturers' Association upon concrete and the the use of cements. That was followed by a discussion, and a stenographic report was made of that discussion. The next day they

listened to a talk by a brick man who understood all about the manufacture and use of brick. That talk and the following discussion were printed, and those pamphlets were distributed throughout the State and they have proved to be very, very useful and the brick and concrete roads this year are much better as a result of that school.

Now when we came into the department we found practically no literature on the subject of roads. There were no magazines, no technical journals, no reference books. We have accumulated a small library and these books and papers are always available in the office for the use of the boys — And they use them a great deal, I am glad to say.

We have been doing lately — in fact are engaged in it at this time — another piece of educational work which I think you will recognize as being practical. The county assistants, the men with whom you come most in contact and have established pleasant relations that have helped so much this year, are coming in here in batches of ten every three days, that is, each group of men comes into the laboratory for three days and puts on his overalls and, working under the direction of the men who make the tests there in the laboratory, is going through all these practical tests, the tests of stone — and we have a great number of samples — and the results of the old tests make a splendid library of practical results for them to study, and then they put them through these tests. They submit to them samples of sand. Now all of us think — I used to — that we can tell good sand when we look at it. A dozen samples of sand are set before them and they pick out what they regard as the best sample. One of the boys picked out the worst sample of sand on a visual examination for the best sand in the bunch. In my practice I have insisted on tests of sand where mortar and concrete were used just as much as I have for tests of cement. Failures of concrete structures have taken place where the engineers and others interested were unable to understand what was the matter and it was found there was something in the sand which could not be detected by superficial examination. Sand tests seem so far to be the most important thing they have learned.

The other tests which are made are tests on all road materials on each road they have charge of, or the roads in the counties, and when they have got the reports heretofore they have said, "The results of the examination made by these technical fellows

in the laboratory are of no account; we are practical, we know these things better than they do, we don't think these tests amount to much, and discount them in advance. Now they know, after having been in the laboratory that the tests are not technical in any theoretical sense. They are practical tests and they are getting the benefit.

Now the next thing we are going to do is in cooperation with Cornell University for a week's instruction in highway engineering in February next at Ithaca, and I have no doubt that many of you, and I hope all of you county superintendents will be able to attend that week of instruction. Each day there will be two or three lectures followed by discussions, starting with the planning of a road right up to the completion of each type of road, and our men here, some of our Division Engineers and the corps of instructors of Cornell University will furnish the brains and the lectures on that occasion.

Now these are all good things, I think you will admit, and they tend to bring about a better cooperation and a more intelligent cooperation of our affairs, of your body as well as ours, all of which tends to the greater efficiency of the Highway Department. (Applause.)

MR. WILLSON.—The next thing in order is a paper by Mr. John Hodgman, county superintendent of Saratoga county, on the oiling of town highways. Will Mr. Hodgman come forward?

MR. HODGMAN.—Mr. Willson a few days ago asked me if I would not say something to you gentlemen about the use of asphaltic oils on gravel roads in Saratoga county. I told him it would not take very long and would not be a very long paper, so I would not take up very much of your time.

The use of asphaltic oil on gravel roadways in Saratoga county was begun in the late spring of 1910 in the town of Saratoga Springs, when approximately a mile of gravel road was given an oil treatment. The oil used was Standard No. 6, containing about 60 per cent. of asphalt. It was heated sufficiently to flow freely and was applied from a gravity distributor. About 4-10 of one gallon per square yard was used, and $\frac{3}{8}$ of one inch of clean, sharp gravel was used as a blotter. It was then rolled with a steam roller and opened to traffic. The cross sections of certain portions of this road were not in the best possible condition,

nevertheless resulting conditions were so satisfactory that in 1911 a road, known as Union avenue, a highway 100 feet wide and four miles long, having a graveled section thirty feet wide, was given oil treatment. Principally for reasons of economy, a 40 per cent. oil was used. The results obtained were so good that general oil treatment was demanded and in the spring of 1914, 30,000 gallons of oil were used on different gravel roads in the town of Saratoga Springs.

Beginning in 1912 the oil was applied under pressure, which we think is greatly superior to the gravity method. The method used in Saratoga Springs has been, as early in the spring as is possible by frequent honings and the filling of ruts and depressions, to get the cross sections of the road in the best possible shape. In late May, or very early June, the road is thoroughly swept with a horse sweeper and hand brooms and about 3-10 of one gallon of 40 per cent. oil is applied to each square yard of surface. We usually allow the oil to remain about three hours and then screen over with a sharp, clean screened gravel containing no clay or shale. The gravel approximates in size No. 1 stone.

We are strongly of the opinion that to get the best results a thorough sweeping is necessary as, if dust is allowed to remain on the road surface, the oil will not penetrate it because of the excessive fineness of its particles and a corresponding absence of voids. It has been my observation that where there are dust patches the road will pick up, pan-cake fashion. A thorough removal of dust has a resulting benefit more important than the allaying of the dust nuisance in that the oil penetrates the surface and gradually forms a thin asphaltic crust which makes your road bed impervious to water.

The resulting benefits of oil treatment of gravel roads, as I have observed them are an entire absence of dust and mud, a smooth pleasant surface to ride over and maintenance charges reduced from 70 to 75 per cent. On the road before mentioned, Union avenue, where it was formerly sprinkled with water, at a cost in excess of what it now costs for oil, the road was always in a dusty or muddy condition and there constantly developed innumerable circular depressions, commonly called "hen's nests." The maintenance charges on these four miles of road when sprinkled with water usually aggregated \$1,000 per year. During 1913-14 the maintenance charges, which included its preparation for oil, would not exceed \$40 per mile. The road has an ex-

cessively heavy automobile traffic and during the month of August, 1914, from six to eight teams, drawing two yards of gravel to a load, passed constantly over one section without materially destroying it.

The gravel in the town of Saratoga Springs is of a very superior character, containing, if any, only a very slight admixture of clay. Since the use of oil was begun, we have been using for surfacing work a very sharp gravel, one that does not readily bind. The oil, however, seems to supply the binder, and it knits readily into a smooth, hard surface.

The necessary apparatus for oiling roads are a pressure distributor and a horse sweeper, aggregating in cost about \$750.00.

An estimate of cost of oiling, based on the supposition that the town owns the necessary apparatus, and that the haul of oil and screening does not exceed two and one-half miles, would be, for a section 100 feet long and 12 feet wide, about as follows:

Sweeping	\$.06
Oil, 40 gallons at 4½ cents per gallon.	1.80
Applying20
1-1/3 yds. screenings placed, at \$1.50 per yard.	2.00
<hr/>	
Total	\$4.00
Cost per square yard.03

We have never had any experience with the use of oil on roads surfaced with shale, and if any of the gentlemen here have had anything to do with that I would very much like to hear from them, because we have in our county a great many sections where we have not gravel, and if any here have had any experience I would like to hear it.

MR. WILLSON.—Mr. Howard of Franklin county has had considerable experience in oiling roads and I would like to hear from him.

MR. HOWARD.—We have applied some oil up in our county and my experience has been very similar to Mr. Hodgman's. I want to say that I went down to Saratoga this last summer and went over Mr. Hodgman's roads that he had oiled. I think he has some of the finest gravel roads in the State of New York without any exception, and I think he has made a howling success of the oil proposition.

Two years ago we tried 40 per cent. oil and most of the work was macadam, the old town macadam roads, and some gravel. It did not meet with the success I had hoped for. I think it is a mistake, unless it is in some place where you want to use it simply as a dust layer, and can renew it from time to time, to use a light oil. We have used No. 6 light cold oil, specified by the Highway Department, and Tarvia B. It is a fact that we have got to do something to hold those old roads. We are making a mistake in every county in this State to keep building new town roads and letting the old roads go to pieces. As I have stated, we have used both Tarvia B and the asphaltic oils. Last year I used somewhere in the neighborhood of 25 carloads — not much — and this year we will have to do a good deal better to keep our roads. I am very much pleased with the results up there with Tarvia and asphaltic oils and I think that is all I can say on the subject.

MR. WULFF (of Westchester Co.).— May I ask Mr. Howard what his experience has been in regard to the use of Tarvia?

MR. HOWARD.— I would answer Mr. Wulff this way: Through the Adirondacks I prefer the Tarvia. The Tarvia B seems to set up quicker. Now we used quite a lot of it, and through the woods I have used the cold system. In the lower part of the northern section we have used the distributor system of putting it on, but in order to cover the whole section we have used the patrolmen and have furnished them with the oil and got them to put it on. We found this, that up in the woods, where it is shady and where the moisture remains, that with the same blotter — we try to get a good sharp sand blotter — the Tarvia B sets up quicker and makes it better for tourists and travelers than the asphaltic does. In the open country, where the sun strikes it more, the asphaltic oil is just as satisfactory, but in the woods we find the Tarvia B is a good deal more satisfactory on that account. In these locations the asphaltic oil seems to mud up after rain and it takes a good deal longer to set after applied than does the Tarvia B.

MR. WULFF.— The reason I asked the question, I have had experience with both the oil and Tarvia application, and have found that wherever the traffic is particularly heavy the Tarvia does not last as well as the asphalt application. I think there is

no material difference where the traffic is similar, but where the traffic is heavy I do not think the Tarvia lasts as long for the reasons pointed out. It dries out much quicker on account of the sun, crystalizes and breaks up more quickly.

MR. WILLSON.— Mr. Nostrand, of Suffolk county, has had some experience — they have oiled a lot of roads down there — and I would like to have him tell us his experience.

MR. NOSTRAND.— I came here more to get information than to give it, still such information as I have in connection with road work and the oiling proposition I will give.

We use a great deal of oil on our dirt roads, and have found that in some sections the lighter asphaltic oil is better than the heavier oil; that the heavy oil makes a surface that breaks up and flakes off with traffic. We have heavy automobile traffic on a great many of our roads. We find that the 40 per cent. oil is better for the dirt road than the 60 per cent. oil. That is the result on the northern section of Long Island. On the south side we had a number of miles of road that had been oiled and broken up under traffic and were full of holes. The town superintendent, Mr. Frank Downs, of Southampton, broke up that road with road plows and put on a small amount of gravel surface and re-oiled it, and the road now is in splendid condition and has been all summer.

We have not had very much experience with the use of oil on gravel roads except around Shelter Island and one or two other places. I find there that the 60 per cent. oil works very well on gravel and holds itself in good shape. One thing I find in the use of oil on dirt roads, especially where oil has been used and holes develop, it is no use at all to fill those holes with clay, with loam or with any other material we can find excepting gravel and oil. If on our dirt roads that have been oiled and have a good hard surface we fill up any small or even large holes with gravel and sand, that gravel and sand sets in shape, irons down, and the road is in very good shape. The same thing applies with the gravel road. I asked Mr. Willson, or Mr. Buck, or both of them, I think, if there was anybody in the room who could give any experience in this particular in the matter of macadam roads, town roads, not State roads. In the town of East Hampton we have about sixteen miles of macadam road that has been built anywhere from ten to fifteen years. That also has been

oiled a number of times, dirt put on it and sand put on it, and I wanted to say that in all work there on the Island where we have tried oil, shortly after, within as short a time as possible — probably within two or three hours after — we have applied sand and gravel screenings. We find that especially on dirt roads the sand seems to have the effect of nailing down the oil in the ground.

But going back to the roads that I was speaking of at East Hampton, I wanted to hear if any better method could be suggested by the county superintendents than those we have used there. With us, the macadam roads have a very good foundation; the surface having been oiled, has grown up above that foundation, and is full of holes of all sorts of sizes. My recommendation to the town board and to the town superintendent of that town is to sweep off that road, oil it, and put on gravel and sand screenings, even it up, and then re-oil the surface; and that is what we propose to do, unless we can find something better, and if there is any gentleman here who can give any information on that subject I will be very glad to have it.

MR. CREGIER (of Schenectady Co.).— We have a small case that would be on the line of Mr. Nostrand's, and perhaps the practice we adopted might be of some use to him. In the fall of 1913 we resurfaced with town macadam a short section of road immediately outside the city of Schenectady. In fact, it is one of the peculiar conditions we have around through the city. This piece of town road connects the city pavement with a State road that extends further into the country. This road was badly cut up with pot-holes. The cost of resurfacing had been about \$500, and we only had about six months' use of it. It seemed to be an extravagance to again resurface it, so I had the patrolmen sweep the holes clean, using some of the equipment the Maintenance Department were using. We purchased 90 per cent. asphalt, filled the holes a little scant with three-fourths stone, bound the stone with asphalt, and brought to grade with stone chips. You see, we were reversing the usual procedure in the ordinary patching of macadam roads. The result was very satisfactory, and, going over the road perhaps two weeks after it was completed, it was impossible to find a patch; the dust on the road had covered the entire surface of the patching and road alike, so that there was not a patch discernible. I think perhaps Mr. Nostrand's case could be met in that way, and I think it would be cheaper to use that method than the method of oiling twice.

MR. WILLSON.— I would like to hear something from Mr. Bogardus regarding his experience in the oiling of town highways.

MR. BOGARDUS (of Onondaga Co.).— I don't know that we have used oiling in town highway work, but we have used it on our county road system as a matter of maintenance and we have had about the same experience set forth by the other gentlemen. We used No. 6 asphaltic oil and the Tarvia side by side last year as an experiment. Both did well, so far as we were able to judge, at the end of the season. The working results the coming spring will show whether the stuff is good for anything the second year. We were somewhat in doubt about it. Of course it will be of some advantage, but how great an advantage we are undecided.

MR. WILLSON.— I would also like to hear from Mr. Seaman, who has a wide experience with oiling of roads through Nassau county.

MR. SEAMAN.— Mr. Chairman, I don't know as I can add anything at all to what has been said. We have some town macadam roads, old water bound macadam that were constructed back in 1898. Those roads have been repaired from time to time until a few years ago we began the system of oiling, and now we have some macadam roads that were built back in 1898 that are in better condition than those the State built in 1908, I guess, or after. From our experience in filling these little pot-holes referred to, I think the better way is to use the same material in repairing as the road is made of, that is, on a gravel road you should use gravel. We have a good many miles of Peekskill gravel roads and we have had very good success in treating the Peekskill gravel in asphaltic oil, the same as we do with the macadam, only on the Peekskill gravel roads as a blotter in covering the oil we use our native heavy sand, which has given very good results, and in some cases where now the Peekskill gravel roads have had two or three years' treatment with this heavy oil, one treatment each year, many people now in driving over the roads think they are macadam roads. And we tried it on our macadam roads and have patrolmen watch every few miles of road, to try and keep these little pot-holes filled with broken stone and heavy asphaltic oil. We really have used a considerable amount of both the Tarvia and asphaltic oil and have found that always the heavy asphaltic oil

gives the best results and it is worth the increased expense to get the heavy oil. We do not really use the light oil.

MR. HODGMAN.— Mr. Chairman, I think I omitted something about our method of repairing oil and gravel roads that perhaps might be of interest. We get about three yards of screened gravel, which we heat. We mix that with about forty gallons of No. 6 standard asphaltic oil. That is shoveled over on a board as you would shovel over concrete. We usually keep about thirty or thirty-five yards on hand, and after rain storms we load that in wagons and go over the road and wherever depressions show by water standing we fill the hole with that. Traffic goes on and in thirty-six hours you would not know that the road had been patched at all. It seems to set up well. I have known a volume of thirty yards to stand nearly all summer.

MR. WILLSON.— Mr. Hodgman, do you put the mixture of the oil and gravel into the holes when the water is there, when it is wet?

MR. HODGMAN.— Yes.

MR. WILLSON.— Do you sweep out the water or just dump the mixture in?

MR. HODGMAN.— We slush it out.

MR. SEAMAN.— I beg to differ with the gentleman. I think the water should be swept out thoroughly and the hole should be perfectly dry before this mixing method which he speaks of is put in. We have used this so-called mixing method, only instead of the gravel we use the broken stone quite a bit. But the great objection to that is unless you are very careful and if the little patch that you put on is a little above it is quite apt to make a bump instead of a hole, and that bump will make another hole just beyond, and we really found that it is much cheaper and has given just as good results to just sweep out the hole, have it perfectly dry and then give it a little coat of heavy oil, if the hole is not very deep, and then fill it in with stone and with the ordinary hand pounder you can ram the stone in and smooth the surface up. In using the mixing method if you are not very careful it will make a bump.

MR. WILLSON.—As I understand Mr. Hodgman, they have done this work up there in the manner in which he speaks. Personally, I would be inclined to agree with Mr. Seaman that perhaps it would be better to get the water out of the hole first, but what are we going to do with a fellow who has put it in in that condition and gotten good results? Perhaps Mr. Hodgman will explain it to us.

MR. HODGMAN.—I think it might possibly be better to sweep the water out, but I imagine the men would not take the trouble to do it. With the water there you can find out where it needs the material, and the results have been satisfactory.

MR. WILLSON.—Now, may I be permitted to ask a question? Of course we all assume—some of us—to know a lot about roads, yet we have to ask questions after all. In the filling in of these pot-holes, as you call them, is there anybody that takes the pains, instead of filling the holes, to trim the edge and have it so that you get a uniform thickness of stone on a square edge and bring it up to grade in that way? It strikes me that if you were putting stone into a round-bottomed hole like that, it would not be as likely to set as if you square up the edge and trim it up and fill it to grade. Wouldn't it have a tendency to set better than if you didn't take the pains to do that? What do you think about it?

MR. HODGMAN.—I don't think on a gravel road that would be the proper thing to do. We go over the road, the holes are filled and the shovel is drawn across the patch. That is about all we do and we get very good results.

MR. WILLSON.—I am a great believer in the idea that eventually—and it is at the present time—the maintenance of roads is the great problem that concerns us; and I am a believer in this, that when any town or any county, or the State of New York, spends \$500, \$1,000, \$5,000 or \$10,000, as you please, in the improvement of a mile of road—it doesn't matter whether town, county or State—they have made an investment in the first instance in that particular improvement. Now it strikes me that provision should be made whereby that investment already made by the town, county or State, as the case may be, may be protected, that it

State for this purpose. The convicts were anxious to get out, were willing to work, the towns almost wholly provided transportation for the men, and the table delicacies of butter, eggs, milk, etc., as requested in return for the labor, and the mutual interchange worked well. I so reported to you, and during the winter of 1913-1914 plans were made by the town officials and myself for greater extension of the convict labor on roads work. At a monthly meeting of the town superintendents held in Auburn, January 22, 1914, the question was brought up and the towns of Brutus, Sennett, Owasco, Sterling, Throop, Niles, Fleming, Ira and Ledyard signified their desire for convict labor, Brutus and Owasco to begin about April 15 and the others in May. This was followed up by petitions to the warden for convicts.

It soon became apparent that there was to be a radical difference in the method of apportioning the work and managing the convict labor, and I was so notified in a letter from the warden of the prison under date of April 28.

In the previous year I had found some reluctance from some of the towns to take the men and I had urged and even carried convicts back and forth in my car to help the work, and, of course, knew that Warden Rattigan was willing to put men out only under his own rules and with surroundings satisfactory to him. I was merely a helper in the work, but I was a helper in promoting the work. Our board of supervisors decided to build some county roads under section 320-a of the Highway Law. Unfortunately, the vote on the question in the board was almost along party lines, a few of the Democratic county members voting for it, but largely passed by a party vote. The enacting resolution passed the board April 15, 1914. In 320-a is an authority for the use of convict labor on county roads. From this can possibly be derived a reason for the refusal, as mentioned later, of letting the convicts work on macadam roads.

(The board has just passed an appropriation for the same amount as last year for county roads by a majority of six more than we had last year.)

Later I was informed that a gang of convicts were going to Fleming under a new arrangement whereby the State was going to pay for the teams and that two local men were to be appointed as guards, and the town superintendent asked me to come out and line up and advise on the road they proposed improving, and I did so.

Soon after, the town superintendent of Throop told me that

he had been informed that if he would get certain influential parties to intercede for him he could get the convicts and the money to pay for the teams and for the extra guards, the town furnishing the butter, quarters, etc., but that they would not be allowed to work on the macadam road, which was the big item in the proposed work of that town for 1914. There was a delay over this point, the work being then in process, till the macadam was finished, when the convicts went out and did very effective work on about four miles of old style, load-in-a-place gravel, the teams for which were paid for by the State, and some concrete bridge work of which they materially reduced the cost.

The spring meeting in Ira had produced considerable argument as to which road should be improved by macadam as the main work of 1914, finally determined as the road north from the village. The town superintendent of Ira phoned me one day that he was told he could get convicts and money for four teams a day if he would build a gravel road running west from the village. But the superintendent said that he was going to follow out the board's orders and build the north road. I told him to take the convicts and build both roads and he did, using the convicts on the gravel road and paid labor on the macadam.

With each camp two extra guards were hired, local men in the town.

The town of Scipio had made application for convict labor but while the decision was pending a discussion arose between two of the local officials with the result that in the end no labor was furnished to this town.

The town of Niles also made application and paid several visits to the prison, endeavoring to get men but were unable to do so until the season was so far advanced that it was considered inadvisable to wait any longer and a gang of Italians was hired to do the work which it had been hoped would be done by convicts.

Cato was one of the towns which had in an application for convict labor. After a time a gang of convicts was furnished, but no money for teams.

The applications from Sterling, Sennett and Owasco, filed in February, fell by the wayside.

There is another side of the question that requires considerable care in deciding, and that I approach with diffidence. Without doubt the men and money enabled the town of Throop to place over four miles of gravel that would not otherwise have been built.

Without doubt the men and money enabled the West Ira road to be built, that would not have been done without this help. Without doubt the men and money enabled the town of Brutus to do much more grading on the Elbridge road than could have been done without them. Without doubt the men and money enabled Fleming to do more and better work than they could have done without them. But there are two questions. There should be a benefit not only to the roads through convict labor but to the men themselves. The year before the men were willing to work, and if we only worked eight hours they were willing to regulate that time with a longer nooning so that we could get nearer the ten hours from the hired teams. Last year they could walk a half or three-quarters of a mile to their work; this year they had to have a team to bring them to work and to take them back for a warm dinner and bring them back to work and take them home again. The ordinary road workman carried his dinner; this year the convicts had to have a hot one, and they wanted Saturday a half day and other time off to play ball, etc. The root of the matter was less inclination to work. Instance in Cato: they assigned eight men to shovel dirt into two wagons on the grading. Instead of all getting around the wagon and hurrying it off, they divided into two gangs of four men each and each gang loaded only its own wagon.

A gang was furnished the town of Ira, but the manner in which the work was managed made it rather expensive. It cost the town for rent, supplies for convicts, etc., \$722.37. This included fifty cents a day for one of the guards, who wanted that much more than what the State allowed, and the town officials were convinced that it was best to pay this \$50 for 100 days to keep the convicts. The town superintendent was building the two sections and spent most of his time on the macadam road. I do not know how much the State paid for team labor, four teams from July to October. If the guard's time was right and the teams worked every day the guard did, then the team bill would be high. They built slightly over a mile of road, did considerable grading, but that is expensive work for gravel road, not laid in courses, no shoulder and not rolled.

In Ledyard the men worked well and good reports only came from there.

Then there was another factor that was important this year. In 1913 it was almost impossible to get laborers for road work.

Certainly the convicts took no man's job away from him who wanted to work. This year labor was plenty and though Cayuga county did more road work than the year before, even finding it necessary to gather together in Auburn gangs of fifteen and twenty men for each of Aurelius, Niles, Ira and Scipio jobs, yet labor was often looking for work. Convict labor should be so handled that it takes no man's job away from him but merely affords labor for additional road work that probably would not have been done without such help. The limits of the road work that can be done are boundless. The work done is limited by the money available to pay for it, and convict labor should merely increase the amount of work done.

Now, I believe in convict labor on highways as a means of benefiting the convicts themselves, that the man after months or years inside, put out in the open, hardens up his muscles, gets a healthy color and gets the spirit which comes from feeling that he can earn an honest living by labor and that not every man's hand is against him. But they are a class that you don't have to tell very often to "take it easy," that if you will give them an inch they will take a mile, and, as I take it, the benefit of the work on the convict is lost if he goes out on the work to loaf along and not do as much as the paid laborer after the days of hardening up are over. I am in sympathy with the convicts. I desire their uplift and a straight life after their release, but I dislike going to extremes. I believe I am more truly the convict's friend if I help him to be able to earn rather than to give. The prisons are places of punishment and should be run, as far as possible, so as to reform. This requires discipline and the 1913 plan of letting men out on the road at their request and as a reward helps both sides. Even then it is the disposition of some of these chosen ones to abuse their opportunities. Somewhere between the two extremes, punishment and privilege, is a happy medium for the care and control of convicts. In that medium I believe highway labor has an important place. It should involve the honor system and be applicable to men who have already served much of their time, but it should be approached as a business proposition, as work, not as a summer picnic.

Convict labor on roads can be made a good thing! It was a good thing in 1913, but as handled in Cayuga county in 1914 I have very serious doubts of its utility, of its having enough advantage to balance its disadvantage.

MR. WILLSON.—It strikes me that possibly the gentleman misunderstood the request. As I remember, the question to be discussed was the benefits of prison labor upon town highways, and it seems to me that the gentleman really forgot to refer to that subject in his paper. It may be I misunderstood him. There were some other gentlemen here who were to discuss this matter. I would like to hear from Mr. Howard of Franklin county.

MR. HOWARD.—Some of us have been trying and fighting to get prison labor used on the highways, and in Franklin county this year we have had, after much work, twenty convicts on an average working upon the highways.

We had a road we could not get into our county system. There were only a few miles in Franklin, the balance in Clinton, and the town did not feel able to go on and spend a lot of money on that road. The warden, Mr. Trombly, told me he was going to send us twenty prisoners and what it would be necessary for the town to furnish and do. He said the guards and the men he intended to send had not had any experience in highway work and suggested that we arrange with the town superintendent to have someone who had had some experience in the work to work along with them and look after it. Those men came up there and they worked. They were soft and green, but they got along and the result is that we have a lot of work done on that stretch of road. They have ditched, they have graded and they have drawn the gravel on. If we don't like the way it is done we can fix it up to suit ourselves, but the material is there and it hasn't cost us anything. We got along in peace and harmony and the people were perfectly satisfied. One man escaped and I understand they have captured him since.

I believe, gentlemen, in convict labor; I believe it is a help, and I believe it not only helps the towns to get improved a lot of roads they could not otherwise improve at the time, but I believe from a humane standpoint it is a proper thing to do and I believe that Judge Riley to-day is entitled to a whole lot of credit in his administration of that one thing.

One thing that happened up there was a little unpleasant for me, but I don't know as I have a right to have a grouch about it. It happened and I have let it go. A lady up there, a camper on the lake, a wealthy lady, took quite an interest in the convicts and on the 4th of July she gave a little entertainment for them. She

was up there and I went up with Mr. Gick and the foreman said to me, "Mr. Howard, we wish to do certain things." It was about a line, and I got out and this lady came along and said to one of the guards, "Well, I see you have got an addition." And that isn't all. He said, "Madam, that isn't one of our boys; that is a highway official."

MR. WILLSON.— We have several gentlemen here who have had experience with prisoners on the roads. I would like to hear from Mr. Murray of Warren county.

MR. MURRAY.— In our county last year, in the town in which I live, we heard about the convicts and we made up our minds that we would try and get some. We made an application and got twenty-five men. They came with their tools and we furnished a place on the fair ground for them. They had one guard. We had a street in our town that needed heavy grading, something which we would never have done if we had not had the convicts. We had them there three months, not the twenty-five men, but an average of fifteen men. We hired, I think, four teams of the local men. We furnished the eggs and the butter, and when we got through we had about a mile of road which was graded wider than the average road in the town. We had a bill of \$721 for team hire, which the State paid. The cost which the town of Warrensburg paid for the fifteen men for the three months was \$72, which covered the price of butter and eggs. We never had any trouble with them. They were men with terms of anywhere from five to seven years and all had probably a year to serve. They were there to get their work done and while I don't think any of them hurt themselves they did a fair day's work in each case. We had some of the work done in the main street where there were ladies and children passing, and in all the time they were there there was only one convict— and he had to be spoken to only once— who made any remark or did anything that any lady or anyone could take exception to. The guard immediately sent him back to the camp; he stayed there a day or two and came back. These men used to come down to the village without any guard and do little errands and if they met anyone they would step out of the road. Of course there was a good deal of opposition and statements that they were taking bread from honest men's mouths, but the fellows who were saying that wouldn't have worked anyway.

In another case, in the town of Hague, we had a road that went up a steep mountain. The grade was such that it was impossible for an automobile to go over it. By making a straight line of about a mile we could eliminate this grade. Supervisor O'Connor of the town got in touch with Superintendent Riley, who sent the men down there with two guards, one a young man who had got some experience in road work and the other an old fellow who had been in the prison service a number of years and liked to have his own way, as we all do. They sent the prisoners in the wilderness, six miles from the nearest house. There were about fifteen of them. Of course, they didn't like it and they kicked among themselves, and the guard didn't like it — there wasn't enough going on — so one day he packed up his prisoners and took them back to the other end of the road, about three miles, and said he wasn't going to stay in a place like that. Supervisor O'Connor got in touch with Warden Homer and in less than twenty-four hours that guard and the prisoners were back where they started from and told to stay there. They made there about a mile and a quarter of new road through the Adirondack wilderness. I have not the figures of what it cost, but it was a little more than usual because the appropriation was exhausted and in order to get this work done the town of Hague agreed to pay the expenses and upkeep of the prisoners if they would leave them there, and that mixed up the cost account.

I want to say that from our dealings up there with the Prison Department and the convict labor we believe it is a success. It does a kind of work that never would be done otherwise, heavy grading and things like that, and it does not deprive anyone of a livelihood because we do our regular work with our paid force and this is something extra that we have not the money to do and without convict labor we could not have done. And in all our experience, as I said before, we have nothing but praise for Superintendent Riley and also Warden Homer of Comstock prison, in Washington county. I think my friend Mr. Richards had a little experience with Warden Homer in Washington county. If there are any questions I would be glad to answer them, if they don't go too deep.

MR. RICHARDS (of Washington county).—Gentlemen, I would like to say a good word for the prison work. If you are thinking about getting prison labor on the roads you want to take into con-

sideration the location and the kind of work you have. If you are going into the macadam proposition on a town road and you have to have an expensive plant and very many teams or much machinery, or if you have to have skilled men, you want to forget this prison labor proposition because it will only be in your way. The county road that was just laid a week or so ago, the Fort Ann-Comstock county road, was put ahead on our list so as to give the supervisors of our county a chance to bid on this road, using a new section of the Highway Law and convict labor, and I figured that the best we could do, giving us the men we wanted on that road, would be a two-year proposition on a five-mile road. Now, in a case like that you would have to get a plant together, get good superintendents and good foremen, and that would put the overhead expense up so that that road would have cost \$8,500 a mile. It was let for \$7,500. Now, if the work you have in mind is more manual labor and common work, then your convict labor comes in. I am speaking for our section of the State, where we look to the prison at Comstock. This prison is different from other prisons because they have men there who have nearly completed their course of instruction in the university and they don't want to run away. They have only one guard to about twenty men and the only thing about them is they don't want to work. I saw one gang take about three months to build a quarter of a mile of macadam road. They were building it just the way they wanted to, had a grand good time and nobody cared. But if you have got to hire teams, plant and skilled laborers for any of your work then you might better hire your Italians and go ahead and do your work and get out, but if it is a case of manual labor and you can get your men, you want to get your men and then don't fret about it; don't let anybody bother you; keep away from it so you won't see it and go back maybe once a month and you will find quite a little done; they will save your towns and county a whole lot of money and you will be glad you had them.

MR. WILLSON.— I think Mr. Hodgman of Saratoga county has had some prison labor there during the past year.

MR. HODGMAN.— Mr. Chairman and Gentlemen: I don't know why anybody should kick about getting something for nothing. They always told me that was a hard thing to do. We had a few prisoners in Saratoga county last summer and had a section of

about a mile and a half of road lying on the border of the lake which had been almost entirely destroyed by wave action. The whole highway fund in that town, which has about a hundred miles of road, including the aid received from the State, was about \$3,000. The proposition was beyond us. I made a request on Superintendent Riley for convicts from Great Meadow prison. They came on the 24th day of July, twenty-three of them and two guards. They allowed us three teams. We built a retaining wall of dry field stone $3\frac{1}{2}$ feet high, $2\frac{1}{2}$ feet thick, and raised the road about 18 inches, and we surfaced 2,600 feet with gravel at a cost to the town for butter, eggs and milk of about seventeen cents a day per man. The only criticism that I have is this, and it probably has been the experience of some of these other gentlemen: We blocked out work for twenty-three men for about three months. Most of these men are short-term men. Within ten days of the arrival of the gang one or two men's terms expired and they went away. On the 13th day of September we only had five left, the terms of the others had all expired and they were not replaced by other men. One other criticism I might make would be that they do not work any harder than they have to with the guard acting as foreman of the work, but I sometimes think that if the guards simply acted as guards and the prison authorities would allow us to put a foreman in and work the men as we would laborers paid by the day perhaps we might get more work. We got a lot of work, though, 2,700 feet of pretty good road, that would have been impossible for the town to have done itself. I am heartily in favor of it and I think the Legislature should make an appropriation twice as large as last winter. In my county ten or a dozen towns want to make requests for prison labor.

MR. COLEMAN.—We have endeavored to use some prison labor and I went to Warden Ratigan of Auburn prison alone and asked for prisoners and he agreed to send them to me and asked me to go back and arrange for a place to store the prisoners. I went back to Cortland and didn't hurry myself about making the arrangements and received a telephone call wanting to know if I wanted him to send on those prisoners, if I really intended to use them. In fact, I had a second call from the warden, but the conditions were such as to make it impossible to use the prisoners to advantage. We had to do the work in small pieces, had to stop from time to time owing to other things, so I could not use them. But

I had absolutely no trouble in getting the prisoners from the Prison Department without any request except going in person to the warden and asking for them.

MR. WILLSON.— I think Mr. Mace of Clinton county has had quite a number of prisoners on the town roads. Would you mind telling us something of your experience?

MR. MACE.— In 1910 I first brought the subject of using prison labor on our town highways before the convention, asking at that time that there might be some way in which the Highway Commission and the Prison Commission might get together and bring out this labor in building our town highways, thereby helping the poor towns to build roads which they could not otherwise afford to build, and by so doing build up the character and manhood of the convicts themselves.

The great question at that time was, "Could it be made profitable?" And I must confess that as I looked into the faces of the gentlemen of the convention I could not get even a look of sympathy, excepting a favorable nod, now and then, from Dayton, Bogardus, McClintock and a few others. I could see, however, that the rest of my friends felt very sorry for me that I had chosen such a mooted subject. I want to say that within the last five years that question has been settled. Prison labor has been and is being used to the greatest advantage in building town roads that otherwise could not have been built.

It has accomplished far more than the building of roads. I want to say right here that more important than any road building is the rebuilding of the characters of these men. It is thus solving one of the greatest problems of the State. We hear so much these days about prison reform, from the chain gangs of the southern states to the wholesale pardoning by Governor Blease, that we get tired of the thing. The greatest reform ever given to man is hard work out in the open air and sunshine, and the greatest breeder of melancholia is idleness, especially so when confined indoors. Let us then remember, with our great enthusiasm for more and better roads to be built with this class of labor, that the important thing is not the road but the man.

The states in which convict labor has been or is at present employed are Alabama, Colorado, Georgia, Louisiana, Montana, New Mexico, North Carolina, Oregon, South Carolina, Virginia, Washington, Illinois, Iowa, Kentucky, New Jersey, New York, Ohio,

Texas, West Virginia and Wisconsin, and from all these states comes a unanimous report in favor of convict labor on town highways. All agree that the best results are derived by putting the convicts on their honor, using them in gangs of from 25 to 50 men, usually without armed guards. Where this has been tried it has been proven that less than one per cent. attempt escape. It has been reported that the men work with an energy and zeal never before equalled and that the quantity of work performed has been tripled.

It has also been proven that highway work is particularly adapted to the needs of the convict, and this is one of the comparatively few fields in which his labor is not brought into competition with free labor. In my own county I found this to be true, that instead of competing with free labor it becomes a benefit. We had several gangs working at different points throughout the county last season. All of them were working on roads that the towns could not afford to improve on account of the expensive cuts and fills that were necessary to make. This required the hiring and using of more or less free labor that otherwise would not have been used.

According to the Superintendent of Prisons, during the past year more than twenty squads, of about twenty-five men each, have been engaged in the construction of town highways of this State. More than seven hundred convicts have been assigned to such work. The Legislature twenty years ago authorized the employment in highway construction of not to exceed three hundred convicts within a radius of thirty miles of each prison. The limit as to number and distance was removed by the Legislature, so that convicts may now be employed on any of the highways of the State.

We had several gangs working in the county last year of from 15 to 25 men each. All of them were out on their honor. The Prison Department furnished some tents for quarters, while in other towns the town provided houses that were vacant along the highway. The towns usually furnished the men milk, butter and vegetables, and the Prison Department paid the other expenses. I think it no more than right that the town or county getting the benefit of this labor should meet some part of the expense. I also think the board of supervisors of each county should designate what roads are to be improved by convict labor, improving such roads as cannot be built as county or State roads and yet are of such importance as to warrant their repair. To illustrate this, we

have just such a road in my own county, starting at the village of Dannemora, where Clinton prison is located, and running to Lyon Mountain and Chateaugay Lake. This town has never received a mile of county or State road, and is too poor to make large outlays for the improvement of town highways, as one-half of the town is owned by the State, so that they receive little or no tax from the same. Convict labor could be started on this road in front of the prison gate and continued until the road is completed. This road is composed of heavy grades and very stony grading — an ideal road to use convict labor on, as the convicts could be housed at the prison until the road was repaired to a distance that would be too far to transport the men.

To get the best results from convict labor a keeper should be sent from the Prison Department to look after the convicts, camp, etc., see that the proper discipline is carried out, that proper treatment be given the men, that close attention to their quarters and their upkeep be given, to preserve order and prevent the escape of any disposed to attempt it. Second, they should be provided with a foreman, and on this man depends more than anything else whether your convict road gang is a success or a failure. I think he should be appointed either by the Highway Commission or the town board, and be under the supervision of the Highway Commission. A man to fill this position requires special experience in dealing with this class of labor. He must be a practical road man, a man who will inspire confidence among the men, strict yet just, whose business it is to govern the men and see that everything runs smoothly and that efficient service is obtained. He should not be afraid to step down into the ditch, and take hold of the work himself, if necessary, to show the men what needs doing and how best to do it. If you will place such a man at the head of each convict road gang to take charge of the work, I assure you convict labor on our town highways will be a great success, both in building better roads for the towns and by building better citizens for the State.

I heartily agree with Mr. Hill of Washington and Warden Tynan of Colorado, who are authorities on the use of prison labor on highways, that when the same is handled with a proper foreman, and the prisoners placed on their honor, used and cared for well, that they will equal or give more work per day than the average citizen employed in such work.

There are many advantages I could point out in the use of convict labor on our town highways, but time will not permit. I

will just touch on the fact that after being so used the men are better fitted to take their place in the world when given their liberty. I also think they should receive some extra compensation as an incentive for good work performed, either in having their sentence shortened or a certain percentage paid them over and above their keep, this to be given the man when his term expires, to start him again in the world, or if he has dependents upon him, to be sent to them, never losing sight of the fact that it is not so much the road we want to benefit as the man. And with the splendid results we have been able to accomplish in the past year with convict labor on our highways without the incentive mentioned, I leave it to you to judge what would be the results if these suggestions were carried out.

I think there could be thousands of dollars saved to the counties of this State if there was a plant erected at Clinton prison to make reinforced concrete culvert pipe from iron ore tailings from Lyon Mountain, and furnished to the towns at the actual cost of production.

I wish to say in closing that the work performed by convict labor in my county the past year was very satisfactory. Several miles of road was built and resurfaced with gravel, and some very large cuts and fills were made. I believe that Mr. Willson, Mr. Buck and Mr. Gick went over sections of this work, and will bear me out in the statement that the convicts were very efficient in performing the work. There was no drunkenness or trouble of any kind in any of the camps.

I believe the Highway Commission and the Prison Commission should work together and in harmony in bringing out this labor on our town highways. I have known Mr. Riley, Superintendent of Prisons, for several years. I know him to be very much interested and a firm believer in the use of convict labor on highways. I believe he has done, and stands ready to do, all in his power to open up the iron doors of our prisons and penitentiaries and bring out this labor, that the State owns and must care for, and place it in the building of our town highways.

MR. WILLSON.— Another gentleman, Mr. Simonds, of Essex county, has had some experience with convict labor.

MR. SIMONDS.— Mr. Chairman and Gentlemen: This is the first year we have had any convict labor in our county. We had

several gangs, three of them. They did some work on the road from Elizabethtown to Keeseville, through a very wild, stony part of our country. The towns were very poor there, and did not have the money to go ahead and fix the road as it ought to be. The convicts did some work there, also in Ticonderoga and over in Minerva. I can say I believe that it is a good thing to have them out, and not only for the men — it is really a help to the towns.

I did not come here with any expectation of speaking, and I will have to be excused.

MR. WILLSON.—Is there anybody else who cares to say anything?

MR. CHARLES H. HESS (taxpayer).—I am a taxpayer in the town of Spafford, in the county of Onondaga.

The one phase that was not touched upon until Mr. Mace spoke is the extra compensation given to convicts. I believe that in that point lies the success of the entire movement, and I want to stand here as a man who will not willingly participate in exploiting a man who is helpless. I believe that the wealthy State of New York is able to pay for the work they are having done. I believe that the upbuilding of the man is the principal thing, but I do not believe that the character of any man is being helped by being conscious that he is being exploited and robbed of the results of his labor day by day by the town in which he lives or in the State that has, because of some misdeed of his, incarcerated him, made of him a convict. I believe that when we consider this aspect of the question we are too manly to stand face to face with a man who is down and out and take from him, from his wife and from his children that were dependent upon his efforts for a livelihood before he made the mistake or committed the crime that he did, I do not believe it is just to the children, I do not believe it is just to the wife, I do not believe it is just to our great Empire State to take from those who are in our power that which the good Lord has given them. Take them out into the open, give them the fresh air, give them an opportunity to work, and then take that which is given to them as just compensation to be held for them until they are discharged, or take it and give it to those who are suffering—the bread-winner is not able to give them that which they have a right to expect.

I wish to rise in support of the argument presented by the gentleman, Mr. Mace. It is splendid, and when I think of the fact that in every avenue of life we have been making progress, but yet we are harking away back to Rome in our penal statutes and in our penitentiaries. It is the building of character that is the important thing, so that when a man leaves the penitentiary, when he leaves the prison, he can go forth as a man who knows that he has had his just deserts. I would like to see the locks taken off every jail and such a sense of honor and such a strength of character brought into those inmates that they would not leave if they could, because they are getting what is coming to them. I visited Auburn prison last summer to see a supervisor who was confined there. He told me he was not lonesome there, as there were thirteen other supervisors to keep him company. (Laughter.)

I believe that the suggestion advanced by Mr. Mace is splendid, and I cannot see that any more effective action could be taken than if this body of men here, this convention, would register by resolution their opinion that those men who are making the roads, who are doing the work that the towns are not able to pay for at the full per diem ratio of pay, that these men should have something and not send them out into the world with the feeling that "The State in which I live has robbed me, and I made that road." I believe, as I said, that this body of men could give an impetus to the idea of reimbursing the men who do that work.

I thank you.

MR. DIEHL.—Mr. Chairman, I would just like to add one word to what Mr. Mace has said. We have not had experience in Erie county with the State's prisoners but we have had experience with the county prisoners from the Erie county penitentiary. We haven't worked them on the roads but we have worked them on the Erie county farm and the work they have done there has a direct bearing on some of the fundamental principles underlying this convict labor. Incidentally I would say that the result has been so favorable that we want to work them on the roads in Erie county but according to the present law it is impossible to do so. They do it in Onondaga county due to a special act, and our board of supervisors have directed the county attorney to prepare an amendment to the statute (which he has done) which will permit the use of county penitentiary prisoners on the roads in any county in the State.

Now I want to differ in some particulars with some of the speakers, that is in relation to the skilled labor. They say that if you want ordinary labor, use a convict, but if you want skilled labor convicts are not available. Just to illustrate I would say that out in Erie county we have a farm of 448 acres about seventeen miles east of Buffalo and on that farm has been erected a concrete-steel building 200 feet long, which we call a detention home, which will accommodate one hundred men, constructed of concrete blocks, and not one bit of labor on that building is free labor, every bit convict labor from start to finish. The entire grounds have been piped for gas and without one bit of labor except convict labor. An ice house has been constructed entirely by convict labor and the ice has been cut and placed in the ice house by the convicts. The county institutions have been provided with vegetables, milk and butter from that farm, entirely the result of the efforts of the convicts — with a little help, of course, from the cows. The farm is intersected by three trunk line railroads, by the New York Central, Lehigh Valley and Shawmut Railroad. Every one of those railroads has a water station and every freight train stops and takes water on at each one of those three stations which is on the farm, and if a man wanted to escape he could step on a freight train. The men are on their honor with one or two guards present, more for the sake of keeping things going and acting in a sense as foreman. There has only been one escape in the time the men have been out on this farm. These convicts are anxious to work and want to work. Incidentally, I laid out this detention house, and when I was laying it out one of the convicts came up and said, "Let me run that transit for you." Now the men live in tents out there, one big tent. This detention house is for the purpose of having them board or live on the farm. They have been living in tents and the cooking is done by the convicts. The blacksmith who sharpens the tools used to make burglar tools and he can sharpen them better than the average blacksmith.

The point I am trying to bring out is this, that you can get the skilled labor among convicts. They can build a macadam road just as well as a dirt road. We have a dirt road in Erie county, on which this situation exists along the line of the barge canal. They pile up big piles of rock alongside the new barge canal and what we want to do is this. We will send out seventy-five men, of the amendment is adopted, take that stone and bring it on this

road which runs right alongside the canal and break the stone by the use of napping hammers, without the crushers — and the finest macadam road you can build is built of stone broken with napping hammers — you don't get the sharp fracture as with crushers. We have built roads under the State Highway Department in Erie county, breaking the stone on the road in that way, where stone was available alongside the road, and that is the kind of work we want to-day.

Just one word regarding the point Mr. Mace made. I agree that the men should be put on the road on the honor system and without uniform. I also agree entirely on the question of paying them. I do not agree with Mr. Hess that the State is robbing the men. The man is confined and he ought to be, and you don't expect to pay the man what his labor brings. The theory is not to pay him for the work of his hands; the theory is to give him some money so that when he goes out he does not have to do another job right away to support himself, and also to encourage in him the habit of working for pay. Now many of these men afterwards have been employed by building contractors. It is an entirely feasible proposition to employ men in that way and they ought to be paid a modest compensation to encourage them in that work, and I sincerely trust that there is not a man in this room that is not in favor of employing convicts on the highways. Mr. Mace referred to the work done in the State of Colorado under Warden Tynan and in Washington under the direction of Commissioner Hill. Conditions show that those things will work out in practice and that we ought to use the convicts in working on the roads. There is a place for them in the road improvement, and before I sit down I want to say there is one thing there is no place for, and that is politics. The great success made in the counties of this State is due to the fact that the average fellow has been retained in office in spite of what party he belonged to, and the strength of the highway movement, what we have worked for for years, has been a non-partisan administration of the highway affairs in the State, county and township, as far as possible, with the idea that as soon as you get non-partisanship in the highway affairs they will proceed better than ever before. (Applause.)

VOICE.— How many guards do they have on the work out there?

MR. DIEHL.— There are no guards, but two foremen, two general all-round men from the penitentiary to see that things are

done right. The men in the county penitentiary are short-term men, and there isn't a man on that farm who has been obliged to stay the whole length of his time. In spite of this they make a success of it.

MR. WILLSON.— There is one thing, as some of the gentlemen have said, we have always put off so long that everybody didn't have a chance to express themselves on it, and that is the question as to where we will hold our summer meeting. I think perhaps now will be as good a time as we will have to dispose of that proposition, and we might as well get started.

MR. LOUGHEAN.— For a number of years now I have invited the county superintendents to hold their meeting in Kingston. Gentlemen, none of you have anything like we have. Not only is the State of New York spending a great deal of money on roads in our county, but the City of New York is putting in our county roads which will cost \$75,000 a mile when completed. If you don't want to come in a bunch, stop in anyway. We have something mighty interesting to show you and you will receive a mighty good welcome.

MR. BRENNAN (of Niagara county).— Mr. Chairman and Gentlemen: For the past two years I have extended an invitation to the county superintendents to come to Niagara county. There is very little I have to say at this time, as this matter has been taken up by an organization of the city of Niagara Falls known as the Niagara Falls Bureau of Conventions, and I believe most of you gentlemen have received from the manager of that bureau a letter setting forth the advantages of Niagara Falls as a convention city. I have given no time or attention to this myself as my time has been quite fully taken up with other matters during the past three or four months. I don't feel there is anything I could add to what Mr. Cutler has set forth in the letter which he informed me had been mailed to all county superintendents. Mr. Cutler is in Albany but, being under the impression that this matter would not come up until to-morrow, he is not here. If there is any question any of you wish to ask I would be pleased to answer it. In the absence of Mr. Cutler I would say that the hotel accommodations of the city of Niagara Falls are unexcelled by any city of the State. You can get as good hotel accommoda-

tions and you can take care of the entire convention, if it consisted of a thousand persons, in one hotel, if that were deemed desirable. We can furnish accommodations there equal to those that can be found anywhere else in the State of New York at the same price, and anywhere from \$2 a day up as high as you want to go and getting value every cent you go up.

In the absence of Mr. Cutler, on behalf of the board of supervisors, the county of Niagara and the city of Niagara Falls, I extend you a hearty invitation to choose Niagara Falls as the place of the summer meeting.

MR. DIEHL.— I would like to second the motion of Mr. Brennan that we go to the Niagara frontier, and would like the question put to a vote upon motion.

MR. WILLSON.— Is there anybody else who cares to extend an invitation, or any remarks to make? Is there any reason why the motion should not be put now?

It has been moved and seconded that Niagara Falls be designated as the place to hold the summer meeting. All those in favor say "Aye."

Motion carried.

MR. WILLSON.— In the notice sent out, the meeting for to-morrow was called for one o'clock. It might be well to change it and call it at eleven; there are some things — the question of amendments and things of that kind — which have not been taken up yet.

MR. DIEHL.— One of the county superintendents of this State — probably the dean of the county engineers of the highways in the State — is not with us to-day. This is the first meeting he has missed. He has been confined at his home with a most serious illness and for a long time his life was despaired of. I am pleased to state now that he is on the rapid road to recovery and there is every reason to suppose that he will be restored to complete health in the near future, and, being closely associated with Mr. McClintock, I would like to move, Mr. Chairman, that this convention extend a vote of sympathy to Mr. McClintock in his illness with best wishes for his early recovery and that this communication be sent to him in writing.

Motion seconded and carried.

Meeting adjourned until Wednesday morning at 11 o'clock.

JANUARY 20 — MORNING SESSION — 11:15 A. M.

MR. WILLSON.— The things that we have to take up this morning and discuss are proposed amendments to the Highway Law. One of the first for your consideration is the amending of sections 40, 42 and 46 of the Highway Law and 82 of the Town Law, relative to term of office of town superintendent. Also you heard the remarks of the Commissioner relative to a suggestion that he made as to the manner of selection of the town superintendent. I think first we ought to take up the term of office of the town superintendent. I think probably Mr. Diehl will start the discussion and give us his ideas in regard to that.

MR. DIEHL.— The ideas I have on this subject may not be exactly in harmony with the ideas that are held by most of you and I do not know as they particularly pertain to the exact point in discussion, that is, the term of office of the town superintendent of highways. I have had an idea for some time in relation to this and I think probably here is as good a place to air the idea as any, because if it is wrong then we can hear the adverse comments on it and I can let go with the proposition. But the idea that I have had is that when the town boundaries were formed a hundred years ago the means of transportation were so limited that it took as long to get across the town as it now does to get across an entire county, and, also, until 1909 the work on the highways, except those towns which adopted a money system, was under pathmasters of districts, and in 1909 they enlarged the district from the pathmaster's district to the town; and it occurs to me that very likely the time is now ripe for again enlarging the district from the town to the county and having the smallest highway district the county, which of course would eliminate the town superintendent of highways either as an elective or appointive official. The result would be that a highway tax would be spread upon the entire county instead of being spread upon the township, with the result that the cities and the villages of the State would pay a large percentage toward the cost of construction, which they should. When the town highways are improved it benefits the cities and villages. Now, in counties such as I come from, where they have a large city that pays 85 per cent. of the tax, it would mean that a highway tax spread upon the entire county would raise from half to three-quarters of a million dollars for highway

purposes; that the work which would be done on those town roads would be done under the board of supervisors; that they would make the agreement the same as the agreement is made now, what they are going to do on the respective highways; and that agreement would have to be approved by the head of the town highway bureau in Albany; that the machinery a town had that was good the county could be authorized to purchase; if there was a good town superintendent the county superintendent would engage the man as foreman. It would not be necessary to stop at the town line. By enlarging the unit you would not only get more money but a systematic improvement and would control it more effectually than now. As far as the township is concerned (and I say this is a very radical idea, but I think it is well worth starting to discuss), the township would receive more improvement than it receives now just in proportion as the cities and villages contributed toward the improvement. The only thing they would lose, they would not elect the town superintendent, but the men would be employed under the county superintendent of highways just as before if they were good men.

To expand that idea a little further, the State has engaged in building the State and county highways and in about five years the construction period will be over. We have spent sixty-five out of the one hundred million and in about five years' time the construction will cease and the proposition will become maintenance, as in the average railroad. Then the construction department here in Albany will be abolished. It is evident that it won't be possible to maintain such an expensive organization just for maintenance. Mr. Carlisle touched on that point, how it costs four or five million dollars, and when the entire system of 12,000 miles is completed that will be \$12,000,000 a year, or about one-fourth the entire expenditures of the State. If it ever reaches \$12,000,000 there is no question but that there will be a movement on foot to try to make the localities pay a share of this expense; probably they will want to put five or six million dollars on the localities and naturally they would be opposed to anything of that sort. The easiest way I can see to reduce the maintenance would be to have it performed by the county superintendents in the respective counties with the same organization as for the other highways and under direction of the Highway Commission in Albany, with the result that the State Highway Commission in Albany would practically consist of the town highway bureau and

bureau of maintenance and repair, with the Highway Commission at the head of all the work and the county superintendents of highways directing the work from the county seat with the board of supervisors and under the jurisdiction of the Highway Commission. The amount of State aid which would be paid would be so balanced that the State would pay practically what they now pay, \$400 or \$500 a mile toward the maintenance of the State and county highways, and \$25 to \$50 a mile for town highways, all the money being deposited in the county treasurer's office subject to draft of the Highway Department. It seems to me that would greatly simplify the situation, instead of having the departments in the State and county and town. You would abolish the departments in 933 towns and have just the department in Albany and deputies in 56 counties.

The objection would be that the interests of the towns might not be looked after, that by reason of politics or otherwise the county board might discriminate against certain towns. It has been my experience that you cannot do anything of that sort, discriminate against people, and stay in your office, providing the work is done close at home. It is possible that, located in Albany, you might fail to maintain a certain highway and nobody thinks about it. But if the county superintendent and supervisor are responsible for the care of the highway they would not neglect it very long or do any injustice in any locality without being brought to a very quick account for it.

That is very briefly stated. I would like to see a little discussion along that line, particularly with a view of making the cities and villages pay their share toward this work. When the construction period is over the cities of the State are going to be relieved to a great extent from the burden of caring for the highways throughout the counties. With this plan of taxation the cities and villages are called to pay a very large proportion of the expense of maintaining not only State and county but town highways, and I think it is no more than just that they should.

In regard to the town superintendent, I believe that the best results could be obtained with the present system in force, of having a town superintendent appointed for a term of four years, appointed and not elected. In Erie county we have 25 towns and at last election 23 of the 25 superintendents were newly elected. The town is too small a unit. The matter is too close to him when the town superintendent plows through the neighbor's lawn or

carries out strictly the orders of the department. I think the man should be appointed. I think it is unwise to elect the town superintendent, and the term is too short for him to get acquainted with the town. That may not be the situation in other counties, but it is in Erie county. We cannot keep old superintendents of town highways.

The success of any form of construction work in my judgment depends on two things: one, the non-partisan administration; two, a reasonably long tenure in office for competent officials. If an elected man wants to hold his job he has got to be partisan and it is next to impossible, if he is not partisan, to retain a reasonable tenure in office. The plan I suggested I think would keep a man in office as long as efficient and it would eliminate at least the town politics from it by enlarging the unit. I sincerely hope that the convention will go on record for a town superintendent of highways appointed for a period of four years.

Regarding the removal, it strikes me that there has been a lot of talk about the Commission of Highways removing and about the county superintendent removing. It strikes me the right man to remove an official is the one who appointed him. If appointed by a county official the county official should remove. We know the State highway officials say they don't want to remove, but let the county superintendent remove him. That looks too much like passing the butt. I think the county superintendent will get in trouble if he removes a man that the town electors elect or even appoint. I think the appointing power should also be the removing power and I think it is rather difficult to put any other plan into effect.

MR. WULFF.—In a general way, I am in full accord with what Mr. Diehl has said, and I want to make this particular point in regard to the larger unit. I want to speak in regard to the appointing of the town superintendent by the town boards. I think such an amendment ought to be put into the statute. But another point brought out is the approval, and that was mentioned briefly yesterday afternoon by the chairman of the Commission, Mr. Carlisle; that is, the approval by the county superintendent of the appointment before it becomes effective. I think that is absolutely an undesirable feature. The present system works out, of course, substantially as Mr. Diehl says, and a good mixer gets the nomination and is elected, whether a good workman or not. In

many cases, the competent man gets the job, and in other cases he does not. I think it puts too much on a county superintendent to have him the final arbiter of whether the appointment shall be effective. It must be assumed if the appointing power lies with the town board they will select a man fit to fill the position. I can hardly conceive the town board would select anyone but a competent man. I would personally be opposed to the second recommendation, that the county engineer or rather the county superintendent approve the appointment of the town superintendent.

MR. BALL (Jefferson county).— I think that I am the only county superintendent with a town which went on record four years ago in favor of having the town board appoint the town superintendent. At that time I had an efficient town superintendent. He was a Democrat. Of course, when the election came up he worked with the Democratic principles and worked and elected a Democratic supervisor. When his term ran out he was not appointed. The result was they appointed an absolutely incompetent man. It took me a year to get rid of that man. In the meantime, the town board got in such shape the supervisor cast the deciding vote and they got the old superintendent back again. Then, this last fall, they went back to the old way of electing the town superintendent. So there is an absolute case where the town board's appointment was wrong, and I am not a bit afraid of the consequences of having a recommendation of the town superintendent by the town board. If I had recommended a man to them it would have been an efficient man; otherwise, we would have to take the responsibility of it. And I say if we are responsible for our county work we ought not to be afraid to assume the responsibility of at least recommending the man for the position. I am heartily in favor of having an amendment whereby if the town superintendent is inefficient that you can recommend to the town board that he be removed, and at the time that that recommendation goes before the town board, that from that time on all highway work in that town ceases. And I am heartily in favor of the four-year term.

MR. DIEHL.— Are you in favor of the town board removing, or of the county superintendent?

MR. BALL.— The town board would remove, but the town work would be tied up until they took action. This same town super-

intendent, it took about six weeks to get him out of office and in the meantime he gets rid of a thousand dollars. I guess he gave everybody who was a friend of his an order on the Highway Department; we figured we had \$2,400 and after that time we only had about a thousand, and I could not figure over \$400 worth of work done.

Also, this year I went after two town superintendents good and strong and the town boards got them both up before them; they said both promised to be good; but they simply went on in a half-hearted sort of way, and I have thrown those towns over and am hoping we will lose the town superintendent at next election.

MR. McEVoy (Yates county).—I understand it is already written into the law that the town superintendent may be appointed if the town so elect. All they have to do is to submit a proposition to the taxpayers and vote on the question and they may be appointed.

The question is whether the term of office be two or four years; and the power of removal. Ordinarily, I think aroused public sentiment will remove the town superintendent if he don't do right.

On the question of concentration of power for spending money, I hope the time is far distant when the town's money will be expended by the State. A town in my county raised \$18,000 for building town highways. They will put that money where they want it. If the money had been put in the hands of the State there would not have been \$18,000 raised. They do not know where it is going to be put. Ordinarily, I believe in leaving the money at home with the home people. Of course, the town highways are different from State and county. I hope the time is far distant when the spending of the towns' money is taken out of the hands of the proper authorities.

MR. WILLSON.—It seems to me we are going too fast. We are discussing two subjects, and one evidently is so far away that we do not need to worry about it. Our main troubles to be solved at this time is the term of office of the town superintendent and the method of election. Suppose we confine ourselves to that particular question for a few minutes and see if we cannot arrive at something.

MR. NOSTRAND (Suffolk county).—As representing Suffolk county, I brought this matter up to our board of supervisors. We

may be a little thick-headed down there, but we cannot see, and I cannot see, as to politics, what difference it makes whether the town board appoints or whether the man is elected. If the town board changes they will change the man. If the election changes, the man will be changed the same way. So that it does not really make any special difference. I think myself that we are making a mistake by having too many laws. Every time we go anywhere there is the suggestion that the law be changed, and we have Legislatures that are changing laws and Congressmen that are changing laws every day. We on Long Island believe that the law as it stands is good, and we stand by the law.

MR. DIEHL.— I would like to ask one question and that is if the towns on Long Island ever select a man to run for office because he is a good vote getter?

MR. NOSTRAND.— They do at times. And I want to say to the gentleman from Erie county, that we have ten towns, and every man in those ten towns is a good man, Republicans and Democrats, and they are all doing good work. If we had a man not doing good work we would not keep him there.

MR. WILLSON.— I am inclined to think that Mr. Nostrand has touched the right point. I believe that the class and manner of men that you would get from appointment reverts right back to the kind of stuff that you have in the members of your town board; whether they have the backbone to stand up and say, "We will appoint this fellow regardless of difficulties, because he is the right kind of man. If you have a town board of that kind you get that kind of a man."

MR. BRENNEN (Niagara county).— This is a matter that has been discussed at previous meetings. I am not in favor of appointment of the town superintendent by the town board. It would not work out well in our county. It might in some others. I have in mind one town in our county where, if the selection of the town superintendent was left to the members of the town board, we would invariably have the son, the brother, the son-in-law or the aunt of the supervisor, town clerk or some member of the town board. It is a close corporation and they would find a job for one of their men.

I do not care whether you make the term of the town superintendent two years or twenty-five. In our county at the last election eight out of twelve town superintendents were re-elected. Three were not candidates for re-election and one who was a candidate failed re-election. I believe that we county superintendents pretty nearly have it in our power without having it incorporated in the Highway Law, to select the town superintendents of the county. I know in going through the towns of Niagara county a question that is very frequently put to me is, "Say, now, Breunen, just for information, how does our town superintendent compare in doing his work with the other town superintendents?" Well, sometimes I try to be a little diplomatic and say, "Well, some of the towns have a better town superintendent." "Well, that is what I thought. Don't you think you could find a better man in our town?" "Well, I think you have just as good a man in your town as in any other town." If I talk that up a little very quietly over the town the season preceding the election, the chances are that man does not come back.

I do not find that the superintendent and the supervisor run in pairs in Niagara county. Four of our twelve towns are of opposite political faith. In the strongest Democratic town in Niagara county there is a Republican town superintendent. In some of the very strong Republican towns there are Democratic superintendents. They do not run with the supervisors there. I think the main trouble is in getting rid of the incompetent or undesirable town superintendent. If there were some easier way provided of getting rid of them I believe we would have to get rid of very few of them. I have had trouble with independent superintendents; hard to get them to do what I thought they should do. If I could impress it on them that I pretty nearly had it in my power to have him removed any time I wanted to, there would not be much trouble. He would do pretty nearly what I thought. Last year we found it almost obligatory to prefer charges against one town superintendent. I did so. The town board spent a couple of days trying the charges and rendered a Scotch verdict. Found him a pretty good fellow, etc., and it was not proven. But still it made him a fifty per cent better man. We did it at a time when it did not hold up highway work in March and April. As soon as he was exonerated and the charges dismissed, he got busier than ever. The good influence was not confined to his town at all, it crossed over town lines and clear across towns and

reached to the farthest corner of the county. I believe that that one thing is the only weak point in the law as it stands now. I believe that the Highway Commission should have the authority and be willing to assume the responsibility of removing the town superintendents. They are further removed than we are. I think they might better do it; but if they don't want to do it, if they want to put that responsibility onto me, I will shoulder it.

MR. KARG (Fulton county).— I don't care how the town superintendent is secured, whether elected or appointed; but we ought to have the power to bring that fellow to terms if possible. I have one town that I have been bothered with for four or five years, with the town superintendents. They change them every term of office. We had one fellow who did absolutely nothing but pick stone with his own team. His successor was a gentleman of wealth and a big farmer and I could not get him to do anything at all until after harvest. He had the supervisor bug in his head and he kept the money, \$1,600, and threw it out in the month of October. The result was he was elected supervisor, and the roads suffered, and we got nothing for it. Our present man deals in fertilizer and farm machinery and he will trust everyone and takes it out in cats and dogs; gets his pay because the men work on the highway. We ought to have some way to get at that fellow so that we could make him come to time. If I should make a charge against him to his town board they would not do anything to him; they'd say he is a jolly good fellow and helps us and does things. I wrote him to attend our county meeting. He had fertilizer to unload and didn't go, although he was a green man and didn't know how to work. We ought to have some way to reach such men. I think the idea we had in last year's law for the Commission to send up a representative to take evidence in the charges would be a good plan.

I am heartily in favor of the four-year term.

MR. WILLSON.— Suppose we take an expression of the opinion of the convention as to whether the term of office of the town superintendent should be lengthened to four years, or not. Are you ready to have the question put? (Voices: Question!) All those in favor of having the term of office of town superintendent extended to four years will say "Aye."

(The response appeared to be unanimous.)

independent factors in the highway business; where I think if he had taken the other line of approach he would have been more successful with his prison work. That same principle is pervading your thought here to-day almost entirely, the political side. There is no use dodging the issue. It has been the same for ten years that I have heard these things discussed in conventions before this one was organized; the same old thing threshed and re-threshed. We might as well own up that it is a political proposition and get down to that basis. I rather get on the business side of the proposition, and that is what I wanted to illustrate and show that a little exercising of the friendship proposition pays.

I had a town superintendent undertake to do work for the county amounting to \$60,000 or \$70,000, largely upon my recommendation, the county footing all the bills. The understanding was that this town superintendent should handle this work under the direction of the county superintendent. There immediately arose the question of organizing this force. Of course, the success attending on this affair was dependent upon good honest effort by laborers and everyone. I simply said to Mr. Town Superintendent: "You hire these men; hire your neighbors, cousins, aunts or anybody you like. Get all of your good teams that are out of business; but if they do not do a day's work you must not expect we are going to pay them. Further, I reserve the privilege, so authorized by the county board, of discharging any man who does not do his duty." We have had no trouble with that situation. Mr. Wilson can vouch for the situation, strictly on a business basis notwithstanding any political inclination of the town board or the board of supervisors. We shamed them to a frazzle and got down to business and are doing the work that way. Let them select the fellows any way they choose. Why bother with that side of it? I believe you can eliminate a good share of your troubles.

But get around to the other point, and fix it so the man who is responsible for the work — and that is pretty nearly the county man, with the Highway Commission back of him — put them so they will be able to say to a man to get off his job if he don't do his duty, and give us efficiency and value received. There is the half of it, and I submit it is the big half. If you can take your men off the jobs when they are incompetent and wasteful, and not wait to blow in a thousand dollars before you get around

to that man, take him off at noon, night or morning, and put another man in his place and then try the issues before some party other than the appointing power. They are cognizant of what you can do with them after they are there and they are going to be mighty careful. Get back to the process of removing these fellows summarily and then let your Highway Commission or superintendent prove the charges and the fellow have his appeal in that way. Perhaps it would be better to say, suspend them pending decision by another authority, and not interrupt your organization and delay work and squander money.

Another feature in connection with this discussion is that there is a contention in regard to the Town Highway Department. In my opinion there has been too much attempt with all of us to say that the town end of it was the strongest part of the highway business and that everything in it was pretty nearly correct. We have got to concede our weakness before we can go to the Legislature and ask for remedy. I think it is fair to say we are lame on the town end; that State money is being squandered, and you know it is, notwithstanding what we try to show; more or less of it is being squandered in the towns; ask our Legislatures to correct that tendency. Then you can apply a few good business principles that even our honored politicians may in time respect.

MR. McEVoy (Yates county).—If the county superintendent is brought in as a part of the appointing power, he should sit with the town board and let the majority rule. To-day, a board may vote to purchase machinery and the town superintendent may hold it up.

MR. WILLSON.—I am inclined to think that Mr. Bogardus has hit the right idea. I would like to ask him to make a suggestion as to the power of removal and where it should be vested.

MR. BOGARDUS.—I have lived long enough to realize the wisdom of getting up these things as loosely as possible. I don't care how. I will remove him if you say so. I have attempted to do something under the old arrangement. A man might be drunk and spend money, and we haven't any authority. If you say that the county superintendent should remove the man, I believe that every man who exercises that privilege or function will be ready to exercise it. That is my opinion of county super-

intendents as I judge them. They are not weaklings; they are experienced in political matters and public matters and they live with us year by year. I believe the county superintendent could handle it consistently and properly and perhaps as satisfactorily as any other authority. I believe also that the State Highway Commission could do the same. But if you crowded me to my best judgment, I would say the county superintendent, because he is on the ground and in the best position to judge and know what is being done. Primarily he is the fellow in the county for everything.

Talking about maintenance, you have painted a great picture for the future, but everything is tending in that direction. Here is the danger—the county superintendent cannot be authorized to take over all of the local work; you have still to leave with the localities as much as you can without disturbing a business arrangement. It is with reluctance that I have to admit that the county superintendent do this, because it is in antagonism to the other fellows. But I believe he ought to do it. I do not think he ought to pass finally upon the proposition. I think he ought to be in the position of any business man, farmer, or any employer of labor, that is, to say, “We don’t want you and we have a man to put in your place;” and to make such changes as the nature of the work and events require. Then I think the thing to do is to go further and finally adjust it. Under no circumstances ought business to be interrupted or disrupted. How shall we fill the vacancy? Fill it immediately, temporarily, by one of our own fellows out of the county department or out of another town, and keep the work where it belongs, subject to further determinations.

MR. WILLSON.—Do you care to take an expression on this, or do you want it left here to take the matter up with the Legislature and discuss ways and means and what would be the best thing to do and ask them to make some arrangement to relieve the situation? Or have you any definite ideas?

MR. WULFF.—I move that we take an expression of opinion as to whether we should take the matter up or not.

MR. TIBBITS (Madison county).—I have a thought that may be worth considering, that the charges be made against the town

MR. MACE (Clinton county).—I, for one, am in favor of trusting to the voters of the county or State. I think when we get away from the people we are going too far. I trust the people any time, and I wish to say that in the changing of a man, suspending him temporarily, it would be a nice thing if we could fill the vacancy from another town and show the town what an experienced man could do.

Then in regard to the use of power of removal of men, if we will incorporate that, we won't have any trouble with the law as it now is.

MR. LOUGHRAN (Ulster county).—Assuming that we are duly organized and assuming that a motion has been made, although not seconded, I therefore move that the motion be put on the table.

MR. SEAMAN (Nassau county).—The motion was made but not seconded; therefore it is not necessary to put it on the table, is it?

MR. MACE.—I will second the motion, for that purpose.

MR. WILLSON.—The question is on Mr. Loughran's motion to lay the matter on the table.

Motion carried.

MR. WILLSON.—The next thing to be considered is amendment to section 48 which provides that the bond of a contractor for the building of a highway bridge should be equal to the amount of the contract. That is an error and should be corrected; it should be fifty per cent of the contract.

MR. BRENNEN.—What is the necessity of a fifty per cent bond? I do not see any reason why we should require the contractor—I have held that twenty-five per cent of any reasonable bid is an ample bond. There is no reason why the contractor should be required to pay a bonding company a commission on an unnecessary twenty-five per cent amount of his bid.

MR. WILLSON.—I think the usual contract is fifty per cent bond.

MR. BRENNEN.—Yes.

MR. WILLSON.—I think that is the usual practice the world over. What is your practice, Mr. Bogardus; what do you require in your county work?

MR. BOGARDUS.—Fifty per cent.

MR. WILLSON.—I think that is the general practice. I think the law fixes the bond fifty per cent.

MR. BOGARDUS.—Old section 320 provides that the letting of the work shall follow the procedure outlined in section 130, etc.; that takes care of State business. Therefore it follows that whatever the State uses as a basis for those things would be applicable in the county.

MR. WILLSON.—That might apply in this case, too, because the State contributes money toward the building of highways. I think the fifty per cent bond is about right.

MR. MACE.—I would make the motion that the law be so changed.

Motion regularly seconded and carried.

MR. WILLSON.—There is the usual amendment we have up each year relative to increase of amount for the purchase and repair of machinery from \$500 to \$1,000; that is, an amendment to section 94 of the Highway Law. I know how it affects several towns in my own county. You take the town, for instance, that is equipped with crushing plant and roller and machinery for working the roads; \$500 won't keep that machinery in repair. They have to dodge around to get money into the fund and it seems to me that amount ought to be increased. I await your pleasure on that.

MR. DAYTON.—I move that recommendation be made that the amount be increased to \$1,000.

Motion seconded by Mr. Ball, and carried.

MR. WILLSON.—Last year there was a law enacted in regard to bridges on county roads, to put the whole of such expense of public

bridges over streams or waterways intersecting county roads, on the county. In some counties that does not work out very good. In a number of counties they are starting in to adopt the county road system and I thought perhaps this might be a matter, some of you who are interested, might want to discuss a little — whether your counties want to assume the expense of bridges. It is on the county now where the county road system has been adopted.

MR. HOWARD.— That law was enacted last winter. It works a hardship in Franklin county. We have a small county road system up there and some of our richest towns in the county have a great number of long-span bridges that were built years ago under the tin-type plan, and now there is an expense of reflooring and reinforcing those bridges and there is no provision in our county road act that we can raise any money to maintain those bridges. The people of the wealthy towns and all parties concerned have understood that the town must maintain those bridges; they are perfectly satisfied to do it. They don't want to put it onto the county. My board of supervisors asked our members by resolution to introduce a bill to either repeal or amend that, whereby Franklin county would be exempted from the provisions of that law. I have talked with some county superintendents that have the county road act and I find that it works out that they wanted this amendment made last winter, and I think there ought to be some way to get at it that the counties which are injured be exempted. It seems to me towns might be excepted in certain quarters whereby it could not be an injury to counties that do not want the act. Our towns are unanimous for maintaining their own bridges, and we are going to try to have the act repealed or amended at this session of the Legislature.

MR. BRENNEN.— I would like to inquire if you have a provision in the Highway Law that now permits boards of supervisors to assume the cost of the repair of any bridge in any town if it appears to them that the proper repair would be too burdensome to the town?

MR. WULFF.— I think the county only has the right to provide \$2,000 toward the construction of any town bridge if it can be shown that the town is too poor to pay the entire expense.

MR. McEvoy.— If the board of supervisors pass a resolution to build a county road — the definition of a bridge is a highway carried across the stream — I don't see why they should not take care of the highway from one end to the other.

MR. BOGARDUS.— Perhaps I might help you set the question right. This law only applies to county roads — not county highways. That distinction confuses us a good many times. It has nothing to do with the work that the State has control of. It is this special class of county roads to which this act applies. Some of us are county road men and not county highway men at times. I do not know how this thing would apply. I have wondered who was responsible for it. Now your State Department has been endeavoring to strengthen a weak spot in your system, and that was to make a bridge conform to other things. We want the bridges everywhere on the good lines of road. County roads are to be county system roads eventually. They have not yet reached the question of getting a county system road across the county to join another county system road. That time is to come shortly. It is just as important to have good bridges on the county roads as in your State system, and you must eventually have them in both. So why need we be terribly concerned about the matter. It can be softened a little bit by inserting in your law either the provision that is in old 320 section on county roads, or a clause to be charged to the county unless otherwise apportioned upon the towns by the county board. You have the whole thing then where each locality can take care of itself. If the county wants it built it can; or it can say to the town to pay ninety-nine per cent and the county one per cent, and so on, and that is all there is of it. I believe there is a good principle involved that should not be annihilated, although it might be softened by amendments.

MR. HOWARD.— This year our board of supervisors provided \$109,000 for highways on an assessed valuation of \$13,000,000. We haven't the money up there and it was not contemplated at the time by our county board to maintain the bridges. We haven't the money to spend that they have in Onondaga.

MR. COREY.— I have one subject troubling me somewhat along this line. We are building in Herkimer county bridges with

concrete floors complete. When it comes to carrying the highway over these floors, we are met by an opinion of the Attorney-General that the State cannot carry the State construction across the bridge. I think that there ought to be some amendment to the law that the roadway, after the bridge is completed suitable for carrying macadam construction, should be built separate from the bridge; that after the town has prepared the roadbed by making the proper fill over the bridge, that the road construction should go as a part of the highway construction. I have in mind a State highway of about five miles where there are eight breaks of about fifteen feet each in the construction caused by bridges; and there is no reason why the State should not have cared for the whole five miles without a break. I think some amendment to cover this trouble ought to be made.

MR. TIBBITS.— To bring the matter down to direct consideration, I would move that we recommend that the statute be amended as suggested by Mr. Bogardus, unless the expenses are otherwise apportioned by the board of supervisors upon the town or towns in which the work is being carried on.

Motion regularly seconded, and carried.

MR. WILLSON.— Several of the counties have been constructing roads under section 320 as county roads and up to the present time they have been unable to receive any State aid for maintenance for roads built under that section. Several other counties are contemplating building roads under that section. The thought has occurred to us here in the department, and several gentlemen have spoken to me about it, that it might be well to undertake to have section 320 amended or else have a new and general section incorporated to fit the whole State, whereby the counties operating under that provision of the law might participate in State aid for the maintenance of county roads after constructing. We have started out to whip that section into shape so that the counties will be able to come in under that. Has anybody anything to say on that? Do you think it advisable to make that effort?

MR. KARG.— Fulton county has about eighty-seven miles of road under 320 and 320-a, and it is a very poor county alongside others. I think it would be a good thing to get State aid on the maintenance of that road. The law now makes the town take

care of the road unless the county sees fit to contribute. Right now in one town they have already cut their annual appropriation for highways in section 1 from \$1,200 down to \$600, looking forward to the maintenance of that section of the road under section 320. I think we ought to have State aid on that road.

MR. BOGARDUS.— We have been trying to get the State aid for a couple of years, so I am with you on anything you have in mind. We are willing to pay our money, but if the other fellow gets it we ought to have our share. There is the trouble, of working into the road system a great discrepancy of principle and great variance of features. It is due to each county seeking to take care of itself by something bordering on special legislation. If the matter proceeds with this great variance it is only a short time before you will have to restrict the special case and come down to general legislation. That is the real question you are seeking to arrive at; that is quite a big proposition. I do not believe this body is properly constituted just at this time, when we are waiting for dinner, to go into that question to that extent. The best way to proceed, in my judgment, would be to put it over to a committee and get something tangible worked out, taking into consideration the different plans outlined in the various laws and doing justice to all, making it general so that each county can do its share and our good strong county, where we own up to \$175,000,000 assessment instead of \$13,000,000 — I say it is not begging the question, and we simply want equal privilege on an equitable basis. If we can get the thing on that basis we should be very happy to enter into the arrangement; or if not we will take our chances on the roustabout proposition. Our county attorney is getting up some proposed legislation now to cover some of these matters. We may have to appear here and take our chances and would much rather join with you generally than attempt to pull out anything alone. I have so advised him and asked him to await the sentiment I might find expressed here among you gentlemen. We are looking for more roads than the State can give us; we are getting them; working our prisoners to the limit; and working everything so far as our board will find the money. At the same time we are not as independent as we appear to be, and need all we can get. I believe this law should have that otherwise provision that Tibbits has helped me bring forward as the rider and the whole proposition as regards appropriations and other matters; and that is, let the board of

supervisors decide what each county may do, subject to certain general regulations by the State authorities. Then you have a working proposition. You cannot frame a law on specific lines and principles that will fit the eight and twelve million dollar valuation in our county and go up to Erie with the same kind of clauses and details and make it apply successfully, unless you get through with the thing by assuming that the board of supervisors must determine for itself under certain restrictions and regulations.

MR. WILLSON.— Do I take that as a suggestion that a legislative committee be appointed? I think this is of vital importance and a matter of some magnitude.

MR. BOGARDUS.— Just one thing further. Why don't we get some little advice from the department concerning this question. It seems to me we ought to work these out harmoniously. I would like to inquire if the department is disposed to approve of some plan of working out a county road system upon more general lines?

MR. WILLSON.— I can say that you have the hearty co-operation of the department along that line, and as a matter of fact we have something here new in the form of a bill making it a general proposition. But, of course, there are so many diversified interests that it is a difficult problem. I am a little timid about tackling the proposition without consulting with the representatives of the counties who have gone through this and had the experience. I would be glad if a motion was made to appoint a committee to take this matter up with us here.

MR. DIEHL.— I would like to make a motion that the chairman appoint a committee of ten to take up this matter and all other matters of legislation, and that he appoint them in the following manner: One for each of the ten divisions, and that the chairman, who is the Deputy Highway Commissioner, consult with the county superintendents of highways from the different counties and appoint those that they wish to represent them. I think this would work satisfactorily, they taking up this matter and other legislative matters and also the resolutions passed to-day.

MR. HOWARD.— I would suggest that the committee should meet either to-day or to-morrow.

MR. DIEHL.— I accept the amendment.

MR. TIBBITS.— I would like to offer a suggestion to the mover and the amender, that it might be changed so that the committee would be composed of county superintendents who have adopted the county road system.

MR. DIEHL.— I would object to that as a mover, because we are all vitally interested. All of us should be on a par. In anything in the nature of general legislation, one superintendent is just as much interested as another, and the committee should represent all parts of the State.

Motion regularly seconded, and carried.

MR. WILLSON.— I would ask each district supervisor to get the county superintendents for their district together and select your committeeman and bring him to my office upstairs.

MR. HODGMAN.— I would like some information in regard to the laying of 2 x 4 bridge floors.

MR. WILLSON.— I think we have a gentleman who was responsible for putting down one of the first floors of that kind which was put down in the State, and I would ask Mr. Getman what his experience was.

MR. GETMAN.— The problem of bridge flooring has troubled me ever since I have been in the Highway Department. Up in Herkimer county, with the aid of Mr. Corey, we have got out the idea of putting down 2 x 4's and covering them with tar or asphalt and putting gravel or coarse sand over the top of them for our roadway. I came down into Montgomery county and met the county superintendent, Mr. Lathers, and explained the matter and he fell in with it. He has the honor of building the first one of those bridges in the State, at the foot of Tribes Hill, between Tribes Hill and Fonda on the State road. Since then we have had a great many put down. My theory was at the time that these 2 x 4's set up edgeways and covered with asphalt or heavy oil,

spiked together, at least three spikes to each piece, covering it with oil on the outside, or asphalt; put another against it and continue that process until we got over the bridge, then put on an asphalt or heavy top and follow that with coarse gravel or fine crushed stone as a basis for the roadway for the traffic. We have those in all the counties in my district, I think, now and the other district supervisors tell me they are having them nearly all over the State and so far they have worked very satisfactorily. They are noiseless, no ravel, no movement, and we think they add strength to the bridge. The oldest one has been in nearly three years.

In regard to the lasting quality of those plank, we do not know yet. But we do not see how they can decay, because they are absolutely covered with asphalt which prevents the water from going into them. If a town superintendent will watch his bridge and when it becomes necessary, put on a new coat of asphalt and sand or gravel, I don't know why they won't last for a great many years. The length of time they will last we cannot answer. The wooden part of the bridge has received no wear whatever. The thickness of the asphalt coating as a rule ought to be about a quarter to half an inch and then put in what gravel or crushed stone will fill it. In other words, we are putting a bituminous top over the bridge.

VOICE.—Do you advise covering the 2 x 4 entirely with oil before laid?

MR. GETMAN.—Either dip them or use a brush.

MR. WILLSON.—If there is nothing further before the meeting, we might as well make the final adjournment now.

MR. BALL.—Has that committee got the power after their recommendations—will they meet the approval of the body? What is the use of going over the stuff and then adjourning here for a year and have it held over?

MR. WILLSON.—My idea is that it is up to you to formulate a bill that will be acceptable to the Legislature and the Highway Commission and undertake to get it enacted into the law at this session. That is my understanding of the duty of the committee.

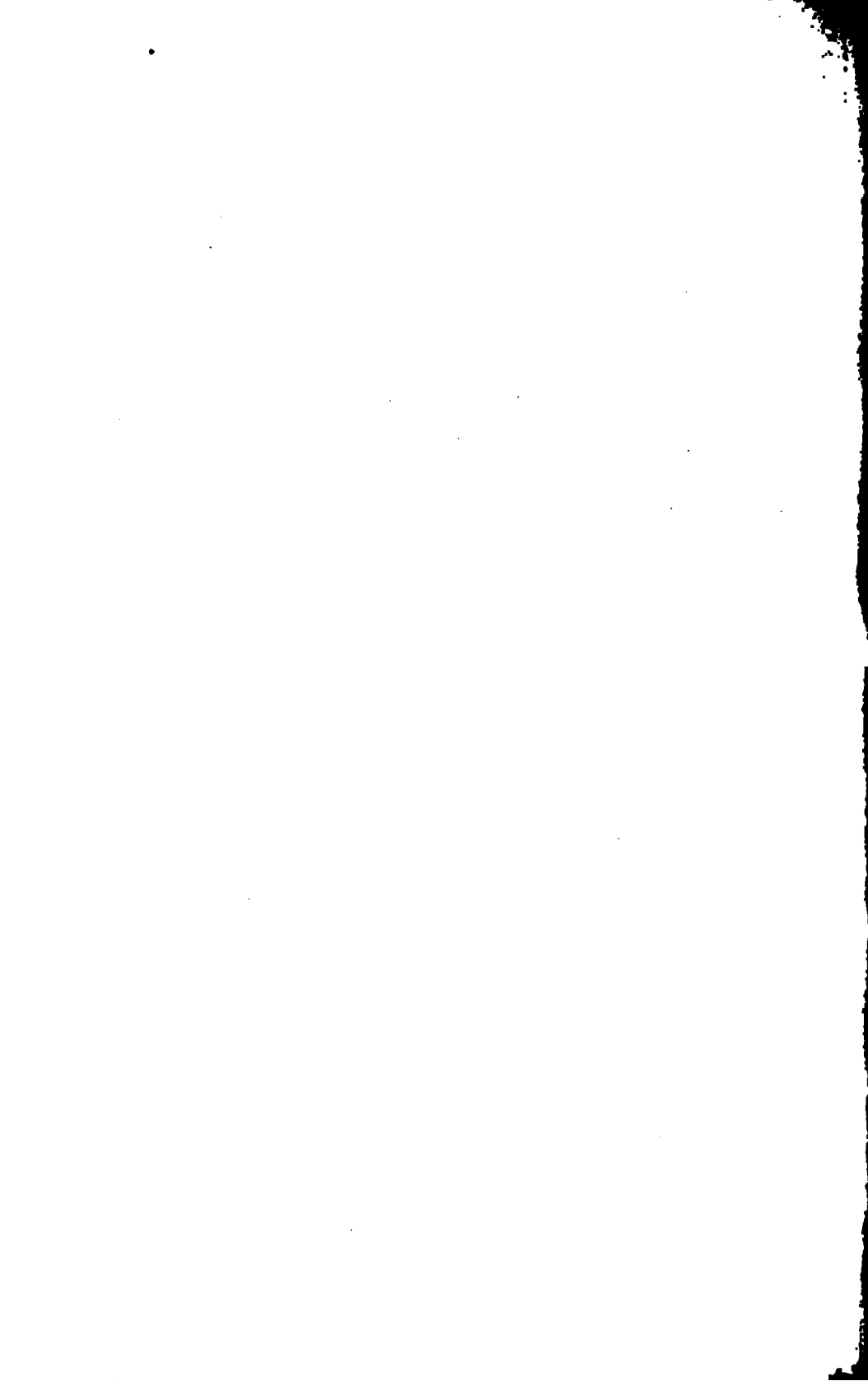
MR. LOUGHREAN.— I move that the committee be given power to act on behalf of any proposition they, by a vote, would consider proper.

Motion regularly seconded, and carried.

MR. WILLSON.— I want to thank you, one and all, for your hearty co-operation in the work and the results that you have accomplished this year, and I hope you will all survive the winter and that next year may be the banner year to each of you in your respective counties in your highway work.

I now declare the meeting adjourned.

Conference closed.





STATE OF NEW YORK

DEPARTMENT OF HIGHWAYS

PROCEEDINGS

OF THE

THIRTEENTH SEMI-ANNUAL CONFERENCE

OF THE

STATE COMMISSION

AND

County Superintendents of Highways of
the State of New York

UNDER THE AUSPICES OF THE

STATE DEPARTMENT OF HIGHWAYS

AT NIAGARA FALLS, JUNE 25-26, 1912



ALBANY
J. M. WHITTAKER, PRINTER
1912

the 1990s, the number of people with a diagnosis of schizophrenia has increased in the United Kingdom (Meltzer 1998). The prevalence of schizophrenia in the United Kingdom is estimated to be 1.2% (Meltzer 1998).

There is a growing awareness of the need to improve the lives of people with mental health problems. The United Kingdom has a number of government departments and agencies that are responsible for the provision of mental health services. The Department of Health is responsible for the overall policy and funding of mental health services. The Department of Social Security is responsible for the provision of social security benefits to people with mental health problems. The Department of the Environment is responsible for the provision of housing and other social services to people with mental health problems.

The Department of Health has a number of initiatives aimed at improving the lives of people with mental health problems. The Mental Health Act 1983 was amended in 1995 to give people with mental health problems more rights. The Mental Health Act 1995 gave people with mental health problems the right to refuse treatment. The Mental Health Act 1995 also gave people with mental health problems the right to be consulted about their treatment.

The Department of Social Security has a number of initiatives aimed at improving the lives of people with mental health problems. The Social Security Act 1998 gave people with mental health problems the right to be consulted about their treatment. The Social Security Act 1998 also gave people with mental health problems the right to refuse treatment.

The Department of the Environment has a number of initiatives aimed at improving the lives of people with mental health problems. The Housing Act 1996 gave people with mental health problems the right to be consulted about their treatment. The Housing Act 1996 also gave people with mental health problems the right to refuse treatment.

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UNDER THE AUSPICES OF THE
STATE DEPARTMENT OF HIGHWAYS

AT NIAGARA FALLS, JUNE 23-24, 1915



ALBANY
J. B. LYON COMPANY, PRINTERS

1915

V D C

COMMITTEE OF ARRANGEMENTS

Appointed by Niagara County Board of Supervisors.

B. F. GOULD, Cambria.

A. J. NICHOLS, Lewiston.

BRUNO G. KRUEGER, Niagara Falls.

JOSEPH W. TURNER, Lockport.

WM. J. STIEG, North Tonawanda.

County Superintendent,

THOS. M. BRENNAN,

Niagara Falls.

RECEPTION COMMITTEE

Appointed by the Mayor for the State Convention of County
Superintendents of Highways.

Honorable Robert H. Gittins.

Honorable Philip J. Keller.

William F. Gassler.

John F. McDonald.

Augustus G. Porter.

E. T. Williams.

Colonel M. B. Butler.

Paul A. Schoellkopf.

Richard Crick.

J. E. Montague.

Philip P. Barton.

John G. Gentleman.

N. V. V. Franchot, 2d.

Joseph H. Butler.

Edward E. Russell.

Matthew Gorman.

Charles A. Franklin.

Thomas E. Vanderlip.

Charles H. Banks.

Martin H. Zahner.

Bruno G. Krueger.

Henry Roeder.

George B. Robinson.

James Hogan.

George F. Zeiger.

Frederick W. Stricker.

**PROCEEDINGS OF THE THIRTEENTH SEMI-
ANNUAL CONFERENCE OF THE STATE COM-
MISSION AND COUNTY SUPERINTEND-
ENTS OF HIGHWAYS OF THE STATE
OF NEW YORK.**

**June 23, Inspection Trip, starting from the International Hotel at
10.00 A. M.**

1. Hydraulic Company's Power Canal.
2. International Railway Bridges:
Cantilever Bridge — Michigan Central.
Lower Steel Arch Bridge — Grand Trunk.
3. Niagara Falls City Limits.
Town of Lewiston.
County Highway No. 475, built 1907, oiled 1909 and each
year since. Now part of State Route 18.
4. 4 miles, Devil's Hole.
(Leading up to the Devil's Hole Massacre, history relates
that in the spring of 1763, nine of the twelve
British posts in what was then the West, were cut off at
a blow by Pontiac's league of the northwestern Indians.
Detroit, Pittsburgh and Niagara held out. The Senecas
beset the land communications of the Niagara posts and
wreaked their hatred upon those in control of the river in
the frightful massacre at the Devil's Hole, which occurred
on September 14, 1763. About 500 Seneca Indians
attacked a wagon train going from Fort Schlosser to Lewis-
ton with an escort of 25 men and butchered all of those
who did not jump over the high bank at that point. A
drummer boy fell into a tree top and was saved. Not over
one or two other men in the party escaped a horrible
death.)
5. Lewiston Branch of N. Y. C. R. R. in deep rock cut, built
1852.
6. Niagara University.
Lewiston Railway Suspension Bridge in distance — only
suspension bridge now spanning river.

7. 6 miles, Lewiston Heights, site of old Fort Gray.
Brock's Monument across river to L.
Site of Battle of Queenstown, 1812.
(The Battle of Queenstown Heights was fought October 12, 1812, and was won by the British, but the British commander, General Brock, was killed. Upon the escarpment above the battlefield, where it can be seen for many miles around, stands a noble monument erected to the memory of General Brock. Upon the spot where General Brock fell is a cenotaph suitably inscribed.
Grade crossing elimination.
8. Lewiston Village Limits.
First county seat of Niagara County as at present constituted.
9. Lewiston-Youngstown State Highway.
10. The Lewiston Academy was incorporated April 17, 1828.
It was one of the leading educational institutions of this section for some years. Many men, afterwards prominent in public affairs, were educated here. At the time that the academy was established, the ferry across the Niagara River at Lewiston was the gateway between the East and the West, and the proceeds of this ferry were appropriated by an act of the Legislature in 1826 for the establishment and maintenance of the school. At the time of the Navy Island War, the pupils from Canada were withdrawn and the academy had a fitful existence after that, and the picturesque building has been in disuse for many years.
11. 7 miles, Frontier House, opened 1824.
(Lafayette spent the night here when he visited America. Daniel Webster, Jenny Lind and many other famous persons stopped here. J. Fennimore Cooper wrote the "Spy" within its walls.)
12. Home of Supervisor Andrew Jackson Nichols. L.
13. Stella Niagara — school for young ladies. R.
Five Mile Meadows — so called from their being five miles from Lake Ontario. L.
14. Lewiston-Porter Town Line.
15. Youngstown Village.
16. Old Canandaigua R. R. L.— first railroad in this section; but one train was run over it.

17. Ontario House, built 1842.
18. Fort Niagara Reservation.
19. 13 miles. The Fort.
(Fort Niagara is one of the most interesting historic spots in the country. It contains the relics of two and one-half centuries. The reservation contains 188 acres. The fort has been under three flags: the French, the British and the American. Father La Salle, the French explorer, built there the first structure, other than the Indian wigwam, erected on the Niagara Frontier, in 1669. Again in 1678, he built Fort Conti, which was destroyed and, in 1687, DeNonville, another Frenchman, built there a fort named after himself. The Seneca Indians destroyed it in 1688. In 1725 the French erected a stone structure, the foundation of which remains, and is credited with being the oldest existing masonry west of Albany. The French enlarged the fort but were supplanted by the British in 1759. The British turned it over to the Americans after the War of 1812.)
20. U. S. Coast Guards' Station.
(Through the courtesy of Capt. A. D. Nelson the party witnessed the drill of the Coast Guard, firing life lines and use of the various life-saving devices.)

TOWN OF PORTER.

21. Lockport-Youngstown County Highway No. 800.
22. 17½ miles. Porter Center.
County Road No. 8. Built 1913, waterbound macadam, \$6,500 per mile.
23. 2 x 4 Bridge Floor. Chas. Ripson, Town Supt., 1914.
24. Monolithic Concrete Steel Guard Rail. Designed by County Superintendent Brennen, built by F. E. Dean Co., 1914.
25. Lewiston-Porter Town Line.
26. Elimination of Grade Crossing by Change of Location, 1913.
Cost \$100.
27. Town Highway, built 1912, cost \$3,000 per mile. Alex E. Reid, Town Supt. No repairs. To be oiled this year.
28. 23 miles. Dickersonville.
Lewiston-Dickersonville County Highway, No. 617, built 1908, \$7,000 per mile, oiled 1909 and each year since.
31. 25½ miles. County Road No. 11. Town of Lewiston, Contractor.

32. New Indian Hill Road, built 1912, \$6,000 appropriated by legislature, 1910. Shortens distance from north country to Niagara Falls $1\frac{1}{2}$ miles. Eliminates two railroad crossings, and gives 6% grade as against 15%.
33. Tuscarora Indian Reservation.
34. Stone Quarried to Improve Indian Roads.
35. Indian Cemetery.
36. Capt. Cusick's Park. Member of General Grant's staff in the Civil War.
Site of old strap R. R. on R.
37. End of Indian Reservation.
38. 30 miles. Town of Lewiston, macadam, built 1913. A. E. Reid, Town Supt. Cost \$3,000 and donations per mile.
39. $31\frac{1}{2}$ miles. Pekin.
State Route 30 passing under Mt. Ridge 30 feet below Lewiston-Cambria town line.
40. County Road No. 5, built 1913, \$9,000 per mile.
41. Town of Cambria, earth road.
John W. Pless, Town Supt., 1914.
42. Cambria-Lockport Town Line.
Lockport grading, 1915. H. E. Bartz, Town Supt.
43. County Highway No. 832, built 1913.
44. City of Lockport.
West Avenue County Highway No. 1086, built 1913-14.
45. County Buildings.
Stop on big bridge.
46. 42 miles. Kenmore Hotel for lunch.
P. M. Start from Kenmore Hotel, east on Main and Market streets.
47. Lowertown — the business portion of the town in the early days before the railroad came.
48. Odd Fellows' Home on R.
49. City Limits of Lockport City.
Town of Lockport.
Olcott-Lockport County Highway, part 2, No. 759, built 1912.
50. Slayton Settlement, County Road No. 7 R., bottom course 8 inches (field stone not crushed), top course 5 inches gravel. One-half gallon per square yard asphaltic oil. Cost \$6,000 per mile. Built 1913.

51. 46 miles. Wright's Corners.
Turn to L.
The Ridge State Highway No. 5416, Route 30.
52. Wrights Station on International Railway Co. Lockport-
Olcott Trolley Line.
53. Eighteen Mile Creek.
54. Warrens Corners.
Cambria-Lockport town line.
50 miles. New grading. John W. Pless, Town Supt., Cam-
bria, 1913.
55. Pomeroy's English Walnut Farm. L.
52 miles.
Cambria-Lockport County Highway No. 1045.
56. Home of Supervisor B. F. Gould. L.
57. Cambria Center.
Town Hall. R.
County Road No. 4, built 1913, cost \$9,000 per mile.
58. Shawnee-Cambria County Highway No. 729, built 1910.
59. Concrete Water Trough. L. John W. Pless, 1912.
60. Baker's Hill.
57 miles, County Road No. 5, to R.
61. Cambria Station, N. Y. C. R. R., County Road No. 9, under
construction, \$9,000 per mile.
62. Cambria-Lewiston Town Line.
60 miles. County Highway No. 740. R.
Lewiston Town Highway. L.
State Highway No. 5305 ahead.
Village of Sanborn, to L.
63. Lewiston Town Highway, 1914. A. E. Reid, Town Supt.
64. Lewiston-Wheatfield Town Line.
64 miles. Wheatfield Town Highway, 1914. Ferdinand
Schroeder, Town Supt.
65. Walmore.
66. Lockport Road, County Road No. 6, built 1913-14, cost
\$8,100 per mile.
67. Niagara-Wheatfield Town Line.
68. Niagara Town Highway, 1914. Charles Schesack, Town
Supt.
69. Niagara Falls-Buffalo, Part 1, State Highway No. 5063.
First State highway in county. Built 1910-11.
70. Home of Supervisor A. W. Binckley.

- 71. Niagara Falls City Line.
Hassam pavement.
Pine avenue.
- 72. High School.
- 73. International Hotel, headquarters.

BUSINESS MEETING, JUNE 24.

MR. BRENNAN.—The time for holding our meeting has arrived. As it is necessary to be rather brief, I will take up no time in extending a welcome beyond saying that I am very much pleased to have the county superintendents of the State present in our county. I much regret that the weather was not of the most propitious character yesterday; if we had had a day like this, I think you would have enjoyed the trip much better. I will call on the chairman of the Board of Supervisors, Judge E. E. Russell of the city of Niagara Falls, with a service of a quarter of a century on the board, to briefly extend a welcome.

JUDGE RUSSELL.—It gives me great pleasure, as a representative of the county of Niagara and its supervisors, to extend to you at this time a hearty welcome to Niagara Falls and the county of Niagara. Our county has always been enthusiastic in the way of good roads. We started out early and carried it out with State roads principally. We thought the State was a little slow, and began building through the town. We have kept it up year after year until at the present time we have the following road construction in the county:

County and State highways.....	46.4 miles
County roads	124.47 miles
Town macadam	76 miles

We have in the county of Niagara approximately 950 miles of highways outside of the incorporated villages and cities. Consequently, we have of State highways 5%; 13% of county, and 8% of town roads, and they are laid out so that you can get by a very little detouring through any town or county onto the main State roads. I heard a man remark yesterday: "Here is a town road across here. I don't think there are 150 go over it a year, and yet you have an improved road." It is a fact, although there is probably a little more travel than that. That gives us 26% of good roads in the county. Much better than that, they are all paid for, without a bond against the county.

Gentlemen, it is of great importance for you to meet here or at other places; swap ideas with regard to roads; and I will say again, we are happy to have you here. I know that you have only a short time, and I will leave it for others more competent than I to address you.

I thank you, and want you all to understand the county is yours while you are among us.

MR. BRENNAN.—Gentlemen, I now take pleasure in resigning the chairmanship and calling upon Deputy Rice, who is the official head of the county superintendents' organization, to take charge of the meeting.

MR. RICE.—In behalf of the State Highway Department, the county superintendents, and the members of town boards of the State, I wish to assure the city of Niagara Falls and the county of Niagara, that it is with a great deal of pleasure that we meet here to-day. While, as Mr. Brennan said, the weather yesterday was perhaps a little unfavorable, there is only one thing that I see that Mr. Brennan left undone — I think he should have had sleighbells on the automobiles.

I think it is quite generally understood that our business session comes in the winter and that we wish to take but little time here to-day, and I know there are a number who expect to go east on the Empire State from Buffalo, so I will take very little time. But I trust and hope that the county superintendents will give me the same hearty support that they have the former third deputies in the highway department. I know that it is necessary for the department to work with the county superintendents and the town superintendents, and vice versa, and without the co-operation of all the bureau of town highways cannot be a success. Now, while we may differ perhaps in some of our opinions as to building and maintaining of town highways, I think the one thing we are after is results, and as to how these may be accomplished, there perhaps may be a difference of opinion.

We are unable at this time in Allegany county financially to build many stone roads, so I have been a crank on earth roads — and the large per centum of roads in New York are earth roads, and probably will be for years to come. So in traveling around among the county superintendents, I perhaps have hammered on that point pretty strong; but I do feel that it is necessary, where the earth roads have been put in shape, to maintain them. You cannot put them up this year and expect them to last four or five

years — they do not do it in the construction of State highways. So I feel that it is necessary every year to go over these highways and put them in shape; but I do not care to go into that at this time.

We have with us to-day the State Superintendent of Highways, who I am very much pleased to state put himself out to get here with us to-day, and I take very great pleasure in introducing Mr. Duffey.

COMMISSIONER DUFFEY.— I am very glad to be here to-day, and it really wasn't a case of putting myself out to be here — I regard it as my duty. You are, as well, officers of this great department as am I. It is rather discouraging to have the meeting opened here by a man who has been in the service of his county 25 years, as we cannot quite match that in the heads of the highway department of the State of New York.

But while we are here, however brief the period may be, I believe it is the duty of the head of the highway department to keep in touch with you men, for you to understand the department and for the department to understand you, because that relationship is one of very great importance, and I am inclined to think, not always fully understood; so in what little I have to say to you this morning I really desire to say more upon the point of the relationship between the department of highways from the State standpoint, and the county superintendents of this State from the local standpoint, than upon any other single thing. I wonder if you sometimes realize — you do not always, I am sure — how important and valuable is the function that you have to perform, and also I wonder if you understand its relationship to the main department at Albany. If you will look at the statute you will find that under certain circumstances the department at Albany has the power to make the appointment, and also under certain circumstances has the power of removal, and that indicates more than any argument could, the relationship of the Highway Department with what I will call the county department. And it implies, of course, that your functions are of importance and of power. I believe that the county superintendents of the State, in a way, are just as important as any other branch of the State Highway Department, and you are a branch of it both by law and in fact. The plans for highways must be approved by you. Highways when completed must be accepted by you; and I myself — if I may speak off-hand about it, not trying perhaps to

outline any policy — I am inclined to think also that you should have more to say about the question of maintenance of highways. (Applause.) I am certainly moved to say that when I contemplate the very great problem which the State has upon its hands in determining how to maintain the highways which it has built, we really do not know. It is not our fault either at Albany or throughout the State. There is also, of course, as you well know, the problem which the world is struggling with, as to what kind of a highway to build; and then we have in this State the equally important — and I sometimes, when I survey the difficulties involved, I sometimes think it is more important — the problem what to do with them and keep them in shape, especially in view of the great expenses involved in their building. You know — but it is well to reflect upon it — the State of New York, with something like 6,000 miles of improved highways now built, of one type or another, is receiving from the legislature substantially \$5,000,000 a year for the maintenance of those constructed highways. It goes without saying — we are talking business here — that we have not solved the problem. We have not perfected in New York a system of maintenance which is adequate to the needs involved. It also goes without saying, because you know and you have participated in it to a certain extent, that we are earnestly endeavoring to find out what to do and how to do it. It cannot be done in a day. An organization for bringing it about cannot be made in any short period of time. It requires, first, a large force of men familiar with the work. That is just as necessary as it is to know what work to have done.

Now I really think that you men, familiar with your counties in an intimate way, knowing, as most of you do, having been a long time in the service, knowing the intimate history of the road in question, you can help the State Department of Highways determine upon and put into effect a system of maintenance and repairs which will be an improvement upon that which we now have. Other States, especially the eastern States, have had a longer experience and a similar problem, and I think it is fair to say that up to this time they have solved it better than we have. But inasmuch as it is a fact that the department, even the State, broadly speaking, is fully aware of how important the thing is and the State has been and is willing to furnish the funds with which to do the work, I am sure, first, of the means which is afforded us; secondly, of the intense purpose we all possess to get

that which we want, to maintain those roads, it is only a question of time when we will materially improve the system of maintenance of roads in this State.

And to repeat, I do not say as a matter of law, although that would be all right, but as a matter of every day practice and working out of the problems developed, you men should have something to say as to what should be done more than you now have in regard to maintenance in your particular counties, and by the cooperation which would result therefrom between the central department at Albany and between you who are familiar with local conditions in an intimate way, you can help us from the standpoint of the central department, you can help us immeasurably in trying to get the right thing done. Try as we could in the past, we have wasted large sums of money upon the question of maintenance. In case, for instance, the wrong thing has been done—and it is not by any means a sure thing as to what should be done in each particular case, because men will differ—ways and means and many of them, trained minds and many of them, upon the same problem, is going to be a great help.

I almost wish that you could at your next meeting—this thought occurs to me as I speak—devote the main portion of it to the question of maintenance. I think it is the main problem we have. We, in a sense, know better what road to build in the first place than we know how to take care of it in order to keep it permanently in good condition and never let it get in bad condition. I almost wish that you could make it the first order of business at your winter meeting; that that be taken up in detail. You have the right to do it. You have not, perhaps, legally the same jurisdiction over the subject as over the question of passing upon plans in the first instance and the accepting of roads in the second. I was much interested only last week when spending a couple of days with Colonel Sohier, the chairman of the Massachusetts State Commission, to see what they are doing and learn from him in some detail how they were doing it, and, without making any invidious comparison, I think they are further advanced along this line than we are in New York. And anyway I am sure of one thing as a result of my brief experience there, that they do timely work, which we do not, or have not in many instances, done. We have let too many roads after construction get into a bad condition of repair, when by prompt and timely work they could have been saved and kept where the maintenance

problem would have been ordinary instead of extraordinary. Then it would have been a matter strictly of maintenance instead of, as so many times has occurred, a matter of rebuilding of a road which should have been kept in such condition that it did not need rebuilding. Now I don't know how you would feel about it — but he said it had been their problem as well and that he would be glad at any time to come to Albany with both pictures and talk and tell us what they had done and why they were doing it and what they thought of that great subject. And I make the suggestion here — it never occurred to me before — if you care to I don't know why it should not take place in the meeting of the county superintendents. I am sure if you wanted it they would gladly comply with the request and make it one of the features of your next meeting. I only throw that out as a suggestion.

I think it is the thing that is staggering the department and I have no doubt it does you as you think of this question, that you must feel as I do. Think of it! To build roads at \$10,000 to \$14,000 a mile and then not keep them in condition practically in which we build them. Unless we do, the whole road-building system of the State falls down at the outset, and so that is the one great subject, it seems to me, that towers above all others, because of the great expense involved and because of the needs of the public, who want the roads kept so they can use them, rely upon their condition, so to speak, with their eyes shut. We are struggling with that and talking about it in Albany. Mr. Sarr and his whole department is considering with the greatest care, trying to profit by our own experience in the past and trying to learn something of the experience of others. I do want you to understand — and that is one feature that makes me think it is a good thing to have a talk together — how prodigious that problem is in view of the fact that all over the State are the roads that need this work. You hesitate and doubt what you should do, with the legislature having handed you what really should be considered an ample sum to do it; and while in that uncertainty you are compelled to do the work without sufficient deliberation. You cannot wait. The same is true in regard to construction, in a general way. The problem what to build is ever present — it is world-wide; but meantime the State hands us the large sums of money, and I think it is fair to say that there is not a county that is even patient when it comes to the question whether we

should wait to see what should be built, but the cry is up — "Give us our roads." They are not at fault. It is perfectly proper. This State is wide awake to the value of the so-called improved roads, and having provided the funds with which to build, it demands the roads.

Think what happened only this year in regard to the building of new roads in this State. Last October \$5,000,000 was made available. Of course, it was not used during the winter. The contracts were let. In the middle of winter, the legislature appropriated \$10,000,000 for construction this year, making \$15,000,000 new work this year. We have called the county contributions, in round numbers, \$2,500,000, making practically 17½ million dollars available for work in New York this year — and that outside of the \$5,000,000 available for the maintenance department, and all to be spent by the State Department of Highways in six months.

Again I ask you to consider it from the county standpoint; I ask you to co-operate with the Commission of Highways in this State, within reason of course, to say to your people that you believe the best thing is being done as soon as possible by the State department and that the work is so prodigious that delays are unavoidable. I say to you now — you represent your counties — the department is trying to give your counties in every instance good roads to be built out of the moneys which belong to you as they have been appropriated up to the present time, I might say with perhaps a little more definiteness than has happened before — but it is immaterial what has happened before. I arbitrarily took the amount of money which had been appropriated out of the second fifty million bond issue, beginning last spring when made available — it made \$25,000,000 appropriated out of the second fifty million, and looked up what the counties were entitled to in the total \$50,000,000 and said to them in every instance: You are entitled to one-half of your total amount and if we can give it to you you may have it. More than that, no one will get more than their one-half. And I am very glad to say that I can stand here before you, representing the fifty-odd counties in which road building goes on, and say to you that policy has been pursued from the beginning and that no county in this State, save for little fragments which evened up, is to be disregarded, and in no case has the county had more than its share on the basis I describe, and the only difficulty we are having is to give the

counties what they are entitled to with the limited force which the State Department of Highways has at its command. I say limited — it is very large; it is a trained army; it is an army of engineers; but at the same time, the building of 17½ million dollars' worth of new roads for the State of New York, big as it is, is a tremendous proposition on our hands, and at the same time the same department has to look after the maintenance of the six thousand miles of highways.

Now all that I have said about money, amounts and extent of work is as well known to you as it is to me, only I speak of it because I think you will concede that it is rather forced upon my attention a little more frequently than it is upon yours.

Another thing has come to my attention from time to time and troubled me very much, and I want to bring it in here, talk to you about it and ask your help. We have what appear to be adequate laws in regard to the protection of our highways; laws that forbid the misuse of highways, tearing up by some engine or improper vehicle or the like that passes over the highways. The laws exist, enforced, however, by local action, and, therefore, I am sorry to say, seldom enforced. I am inclined to think that it was unfortunate that the legislature this year failed to pass the proposed bill that prosecutions for abuse of the highways should be conducted from the State standpoint under the direction of the Attorney General. As it stands, it must go back to the locality, and there are many difficulties connected with the enforcement of the laws from the local standpoint. There is no one to pay for it, to hire lawyers, and so forth, and the result is that many grave cases die without action simply because there is no one to take the initiative.

You know of specific instances of injury to the highway on account of reckless conduct with improper vehicles. I want to ask you to do this — I don't know but we would like to know what happens, and when a grave case comes to your attention I wish that you would in brief form let the State Department of Highways in Albany know about it, that we may confer with you and that we at least may gather some information that we may present to another legislature to give it some idea of the amount of damage being done in this way and show the source from which we received it. It could come from no better source than the county superintendents. Occasionally there drifts into the department the information that someone has been over the road

with a spiked or lugged wheel and left ruin behind. I saw one piece where it picked up the bituminous material of the road and carried it along and dropped it in hunks. We have been unable as yet to get any action — no one, in a sense, at fault either. I don't know how you feel about it, but the highways have cost a great deal of money to build and will always cost a large sum of money to maintain, and if there is any one thing to be done above all others it is to keep them from wanton destruction. The man who is doing damage need but turn around and see the ruin which follows in his path and a few smart prosecutions, somebody called up and made to pay for the damage which he had done contrary to the statutes and the rules and regulations which apply, might have a most wholesome effect.

Now you can help the department, and the department will help you — and they are your roads — to try and bring about some improvement along those lines. I would like to ask you to do it, and if we can get the facts I think in due time and at no distant date we can find some way to have the proper machinery of the law so that the right thing may be done in such cases.

I have nothing farther in particular that I want to say except the general statement that I do regard the county highway superintendents of this State as an important arm of this great service. Do not forget the importance of your functions, and do not forget your power. You possess it to a greater extent than you realize. You have rights which you can enforce upon us; you have functions to perform which are just as great as ours. The law is possibly a little defective in detail in the way of defining just what your rights and powers are as distinguished from the department's rights and powers, but that is immaterial if the spirit is right, because it should not result in a clash. In a sense it is something like the National Government, different departments checking up one another. You have well defined rights and it is perfectly proper, and the department expects you to stand upon them, and you have not fully performed your functions unless you do so in a reasonable way. There might be a deadlock because of gaps in the law, but that is always avoidable if there is reason on the part of both parties, so that I feel like saying to you as county superintendents, — State officers — although elected by counties, — with State functions to perform — although limited to the confines of your county, I say to you that we want your aid, we need it. What we do not know is huge; what ought to be done is huge;

the problem is yours as well as ours, and it is a matter of cooperation, joint work which is going to bring about the good results that people are asking for with actual impatience throughout the State.

I want to assure you of a most friendly and well disposed attitude on the part of the State department toward you. I know perfectly well that you have the same disposition toward it. I want to say to you that I ask this, that you endeavor to cooperate with us in an even greater degree in the future than you have heretofore, and I assure you on the part of the present administration that its disposition will be to cooperate with you as far as is possible to a greater degree even than before.

At all times the department would like to hear your views in regard to your county situation. May I say a few words of praise. I have seen a great many of the county superintendents of this State at the home office. I know now something of their history; I know something of their record, and I know in many cases they are men who have held their office for a long period of time, and I have been impressed very much indeed with the knowledge and the skill, with the high standing, the high character of the county superintendents of this State as a class. In addition to that, I have also been very much impressed — the thing which goes with the other statement just made — with their very high purpose and their eagerness to see the right thing done in their own counties. Now that is easy to say for me and pleasant to say to you, probably the thing I ought to say anyway — but I say it because I believe it. I am surprised, because I was wholly inexperienced. I knew nothing at all about the department or about the subject, and I have come to learn that the county superintendents of this State as a class are a very high class, of high-minded, high-purposed, earnest, trained, intelligent men, and therefore all the more valuable and serviceable to the State in trying to work out quickly any answer to the demands of the people, which is their great problem.

May I in closing say this word, say a thing you know but which cannot be too often told to show the comparison, the magnitude of the work which we have on our hands. In Massachusetts they began building roads in 1893, and we began some six or seven years afterward, and very little at that. Up to this year they, all told, have built 893 miles of roads, and we have built over 6,000. We built last year some 1,300 miles in the State; 50%

more in one year than Massachusetts had built in 23 or 24. They built last year 62 miles. They handle $1\frac{1}{2}$ or 2 million dollars a year, and ours runs up around \$20,000,000. You see how great our problem is compared with theirs. It stands alone in road building in the United States, and I doubt if it has ever been matched anywhere; and the only question is whether you, the army of engineers which the State department has under its employ, most of them good, trained and competent men and becoming more so all the while; between us all the question is, how can we do that work within the time that the people want it done and do it well; and after we have done it how can we keep it intact for the future use of the people for whom we are building?

Now, gentlemen, this is more than I intended to say. Is there anything connected with the department that you wish to ask? I might say I think another wonderful thing is in connection with the county and town roads in this State. They are supplementing to a marvelous degree—and we are talking about getting all that work put on a map in connection with our work, so that we may show for the first time how much more a complete system we have than appears on the map at Albany, because the mileage of improved roads which you are building has now become large and it is rapidly growing, and we are planning to get a map that puts that with our work to show what are the improved roads which we may use.

And I want to say in regard to the county and the town road building which is going on so rapidly, that I believe it will be the road building of the future after the present fifty million dollars is expended; we have no right to expect another—we should so regard it—the general talk is that there won't be, and it is quite possible that there should not be, because when that money is spent we should have a very extensive system of county and State roads, and therefore the future proposition is going to be the building of those town and county roads, the county road system which you are doing to such a remarkable degree; what they have done in Niagara, Wayne, Onondaga and some others, and what they are proposing to do in the remaining counties. It is wonderful to contemplate that in half a dozen years in New York, between what the State does and what you do, we are going to have, notwithstanding the fact that we have some 75,000 miles of highways in New York, we are going to see well approaching one-quarter of those roads improved, and that will cover the main

important highways; that great system within five or six years will be all put together and we are going to have roads such as no one in this room or State even dreams of.

MR. RICE.—Have you anything that you wish to ask Mr. Duffey, any questions; any suggestions. We will be glad to hear from you.

MR. LEWIS.—I do not know as it is proper to bring up the matter or the question — you spoke about helping to maintain improved and county highways and town highways. Now, when Mr. Carlisle was commissioner he made a ruling in regard to the use of traction engines with lugs, etc. Does that apply to improved highways, or to town highways, too.

MR. DUFFEY.—I am sure I do not know about that. I took it that it was improved highways.

VOICE.—It covered town highways, too.

MR. LEWIS.—I understand the commissioner has the right to regulate the width of tires to be used on improved roads. Our Board of Supervisors talked that and we have all talked it, but I do not know of anything that could be enforced that would help out our town highways especially, and also the improved highways, more than the ruling.

MR. DUFFEY.—The point is very well raised. You know something about the history of that wide tire business. Everybody, from a local standpoint, has been afraid of it; to put it in very plain language, it was fear of the farmer, because it affected him more perhaps than any other class. I am speaking unofficially, so to speak, but times have changed, and what you say about the use of the wide tire, the adoption of any device which helps keep these roads after we have built them, is going to appeal to the farmer, I believe, from now on, more than to any other single class. He has come to know the value of them and perhaps he is more deeply impressed with the cost of them than is any other single class. The point is well raised. You county superintendents take it home, and if you have anything to say on the subject let us have it, so that next year we can get some legislation to help along this line. I believe the problem is easier now than ever before, because all have come to understand how important it is to have the roads and to know how important it is to keep them in repair. It would not take very much to carry conviction to the mind of everybody how much help the wide tire would be. I do not think we need to fear hostility on the part of any class on that subject.

MR. NOSTRAND.— I want to congratulate the Commissioner on the stand he has taken in the matter of maintenance of our roads. Suffolk county has a number of State roads — not enough — we have a few — but up to last year those roads were in very poor condition. They were built and were left as built. A State road in that condition prejudices people against the State roads. They do not want it. We have a town in our county that says they don't want any State roads, simply because they have been built and left. It is claimed that work is the fault of the contractor. But no contractor can build a road and have the State leave it in that condition and have it stay. We want the roads; but we want also to have them maintained. Personally, I will do everything I can to help in the matter of suggestions in the maintenance of these roads. I am very glad to see that the department is now taking the step of keeping them in proper shape.

MR. DUFFEY.— It is very easy to make a general statement, and I have made that; but what worries us is how we are going to carry out our good resolutions.

MR. NOSTRAND.— I think the suggestion that the county superintendents can say something about the maintenance of roads is very proper. I know in my own county we have ideas as to how the roads should be maintained after they are built, and with the consent of the Commissioner I shall certainly have something to say about it.

MR. DUFFEY.— I can say this, before it has taken perhaps any form of ruling, that the Department of Highways will welcome from you county superintendent your ideas, your opinions, your recommendations in regard to this subject, properly communicated to the department, and it will be considered as coming from a most valuable and high source and in no sense will be disregarded. How it should be communicated is perhaps back through the organization which exists; to the men in charge; or to the division engineer, or the like. But your ideas and cooperation will not only be welcome, but I say that we solicit them.

MR. DIEHL.— While I do not want to start any general discussion or take time, you have touched upon a matter that is vital in the estimation of many county superintendents, in regard to the maintenance of roads. The way some of us view it, we realize that within three years the State will have completed its construction program; that the problem will be one of maintenance; that the State department is costing \$2,000,000 a year to maintain,

roughly speaking; that that is economically expended through division offices; that at the expiration of the construction period it will be impossible to keep such an expensive organization — you can't spend \$2,000,000 out of \$5,000,000 for administration. We think we realize that the good roads movement has been held together by the county superintendents of the State. We realize that there have been twelve Highway Commissioners in seventeen years, and that the county superintendents have been in office all that time.

MR. DUFFEY.—Thirteen will be a fateful number.

MR. DIEHL.—We hope there won't be a thirteenth; but there may be. To go one step further, we believe that the State Highway Department should be brought closer to the people, and that the point of contact should be the county superintendents of highways. We believe that when the construction period is over and the division offices cannot be maintained and county assistant engineers, etc., cannot be maintained, that the county superintendents of highways should be the direct representatives of the State Highway Department in their individual counties. A few of us believe that the roads should be maintained under him and under the Board of Supervisors of the county, subject to the rules and regulations of the State Highway Department. We believe that conditions such as exist could not exist if that was the case. For instance, in Erie county I know a main road which has been in miserable shape for three years. If the county superintendent of highways were responsible for that road it would have been fixed or begun in one month, or his life would not be worth living. The point I want to raise is this, there are few believe that that is the ultimate solution of the problem; few of us believe that the experience of these men should be utilized to greater extent. There are a few of us believe that the way is for us to get together not only in one or two semi-annual meetings, but to get together in some compact organization with our own committees which can meet from time to time during all the year. The trouble is this: subjects are only mentioned and then forgotten for six months. And the point which will be brought up later is, whether in your mind you believe that it will be a good idea for us to meet oftener, have a more compact organization, have an organization of county superintendents officered by its own members, with its own committees, to study precisely the questions you raise, of maintenance, protection of highways, how best that result can be obtained, and

then to keep in close touch with the department, because I believe the most important is the bureau of town highways and I believe that will be all that is left of the department eventually. The highway department, instead of 1,500 or 2,000, will be 150 under such a town highway bureau. I merely bring this up in a general question to get your views of such an organization to handle the subject.

MR. DUFFEY.— If Mr. Diehl's inquiry was directed to me, I shall be very glad to answer. I think it could be productive of nothing but good results. It occurs to me if such a body as yours could meet in Albany, where the division engineers could be summoned, as well as the heads of the departments, and where there could be a full, complete and lengthy discussion and consideration of everything connected with this department, I shall most heartily favor it. I even think it would be well if it were a two-day instead of a single-day gathering, with some little preparation and possibly some papers and the like; but after all the papers are the prepared things that are interesting and valuable. On the other hand, an open discussion and debate, more extensive and more carefully planned for than this off-hand one of ours this morning, it seems to me, would be productive of more good. Get together and stay all day, a morning session and an afternoon session, where every subject may be discussed at length and without hurry, in the winter time when it is possible to do that. My idea is that Albany would be the place, or possibly the center of the State. If you men cannot bring to our department things of the very greatest value to it, it argues against every idea connected with the work. Your ideas and experience are of value to us, and perhaps ours in a similar way to you.

MR. DIEHL.— I think one of the subjects for debate should be: "How can we best maintain the highways of the State?"

MR. DUFFEY.— If you meet this winter, get up and tell us what you think about patrolmen. Get prepared to discuss that problem.

MR. DIEHL.— If we have patrolmen, every farmer thinks the fellow is justified in taking the State's money. If the county superintendent was in any way responsible for the man, if he was not needed he would be off the job. It illustrates that very point in the problem, comes back to closer contact between the people and the highway department. 90% of the abuses would drop.

MR. DUFFEY.— The point is well taken. It is very serious.

The patrolman deteriorates into a policeman, and I do not believe we can police 6,000 miles, and I do not think we need to. Many of them have the idea that it is their duty, and they have a right to because the State almost says so. The result is that we are not getting anywhere near out of that system the amount of work which we should get, and it is not always the fault of the system so much as the fault of the individual patrolman in many cases. We have got to find something better; \$600,000 a year paid to those men; it is \$600,000 a year out of the \$4,000,000, 15%.

MR. BOWERS (Steuben County).—As many county superintendents are aware, in my county we are doing the maintenance work with the town forces and we have done away with the patrolmen. As far as we have gone, it has been very satisfactory. The only trouble is that we are getting the work done so quickly we cannot get the material fast enough! Everybody seems to be well pleased with the experiment so far.

MR. DUFFEY.—I think that is a very interesting thing, and I would like to state to you that in the late winter Steuben county came and suggested that they be permitted to take this subject up in that way instead of by the patrol system, and we very quickly and very cheerfully granted them that privilege, and I had not heard before how you were getting along. I only wish there was time to ask many questions about it. I am glad to know you are gratified with the results. We are willing to try anything on this question of the daily maintenance that will look toward better conditions. They are doing that in Steuben county, and if we can get the material we will get it; and if you are working so fast that you have outrun the situation, that is wholly to your credit. It is very interesting, and inasmuch as you have started out to do it and have a season's experience, I suggest that you prepare at some length for another meeting a full report of what you have accomplished.

MR. LOUGHREAN (Ulster County).—I am delighted. Little did I think when I wrote to the county superintendents that the scheme would be taken up so graciously by Commissioner Duffey. I have yet to hear a man who can speak better to an audience than George Diehl. He is the only engineer I have run across who can talk. Consequently, I have little to say. The purpose of the little scheme which I have in mind, which has been so forcibly brought further to our attention, is that fact of an organization of county superintendents. Commissioner Duffey in his state-

ment has, to my mind, covered exactly what was in my purpose. As for antagonism, we have absolutely none, the county superintendents being wholly a body of men well chosen to carry on the functions of the highway law in the interest of the taxpayer.

Without further comment, Mr. Chairman, I move, sir, that you appoint a committee to consist of nine men, county superintendents chosen by yourself, for the purpose of meeting in committee and to determine and listen to any argument for or against a permanent organization of county superintendents of this State. I so move you.

Motion carried.

MR. RICE.— Do you want this committee to meet immediately after the meeting?

MR. LOUGHRAN.— I would be happy to have them meet with us on the Hudson River, or at Niagara. I thought if you cared to meet between now and the next winter meeting I would like to see you in my section.

MR. RICE.— As I understand it, you want them to meet for the purpose of organization.

MR. LOUGHRAN.— I do not believe we could act in such a committee.

MR. RICE.— I will name as such a committee: Mr. Loughran, Mr. Bashford, Mr. Richards, Mr. Diehl, Mr. Mace, Mr. Bogardus, Mr. Van Amberg, Mr. Wulf, Mr. Coleman.

MR. DAYTON.— An organization of that kind would be incomplete without we had with it the head of our department, a gentleman who has had experience as a county superintendent, and I would like to make it clear and offer it as a resolution, that Mr. Rice, the present head, be ex-officio member of the committee.

MR. LOUGHRAN.— Pardon me for not mentioning it, for it was in my mind, to include in my motion.

(The question was put by Mr. Buck, and duly carried.)

MR. RICE.— I thank you, gentlemen. I don't know what else you have in mind; but it is time for the Commissioner to leave and there is one thing that I wish to bring up. We have since our last meeting lost one of our county superintendents by death. There has been a committee appointed to expedite matters, composed of Mr. Diehl, Mr. Wulf and Mr. Smith. I think Mr. Diehl has the resolution.

MR. DIEHL.— Before presenting the resolution, I want to say that the people of Erie county were very glad that the county

superintendents came to Niagara frontier. We along the Niagara frontier are loyal to ourselves and to the State, and that situation pertains in the western counties of the State, and I hope all through the State; but we take a great deal of pride in western New York and we are glad you came, and hope you will come soon again. Probably our most noted representative from western New York is Mr. Rice, and I am very glad to have the opportunity to say before Mr. Duffey that there is no man in western New York more highly regarded than he, and we are all with him and have been for the last twenty years, and are glad he is here.

Now there is one man from western New York who has been at every one of these meetings and who is absent to-day. As far as I know, he is the one man whom death has taken while serving as county superintendent of highways; the very modest, retiring gentleman whom we all loved and esteemed, and the committee which Mr. Rice appointed has drawn brief resolutions which I would like to read.

"Whereas, It has pleased the Almighty Providence to remove from our midst Willis D. Leet, county superintendent of highways of Chautauqua county; and

"Whereas, During his service of over six years as county superintendent of highways and as a member of the county superintendents' organization of the State of New York he has so endeared himself to us by his sterling qualities, his rugged honesty and his high ideals of friendship and business; therefore, be it

"Resolved, That we, as members of the State association of county superintendents of highways, in semi-annual meeting assembled, desire to record our appreciation of his past friendship, our high regard for his noble character and our profound and sincere sorrow at his death, and to offer herewith our sympathy and condolence to his bereaved family; and be it further

"Resolved, That as a tribute of respect to his memory the foregoing preamble and resolution be entered upon the minutes of this association and a copy of the same be sent to the family of the deceased."

(Motion to adopt the resolution was carried unanimously by rising vote.)

MR. RICE.—The time has arrived when the commissioner must leave, and I know there are many who want to get out on the 12 o'clock train. Is there any further business at this time?

MR. McEVoy.—I do not believe the people of this State want

to have it said that the building of State highways will stop when the second fifty million has been spent. It seems to me that there should be something done before the constitutional convention adjourns; there should be something done about raising more money for the building of State highways. It seems to me that it takes now three years under the present form of the constitution to get any money to build State roads. It has to pass two legislatures and be submitted for referendum vote. I want to ask if something could not be done whereby there can be a constitutional provision provided for submission to the people whereby we can get that money quicker than by referendum vote. I do not think the people of New York want to have it said that the highway building is to stop. We ought to have more money. We are spending a hundred million for canals. I think that something should be done whereby the department propose to the constitutional convention an amendment so we can get the money quicker.

MR. DUFFEY.— I am sorry to reply in a way that perhaps is not along the line of your views. I am inclined to think it is not an opportune time to raise such a question. I think it is rather the feeling on the part of the convention itself that the remaining moneys ought to be used to build the necessary and important State highway systems of the State, of both counties and county-and-State, and I think a suggestion looking toward a further appropriation, and which would be furnished by the sale of bonds, would not be well received at this time. I think their minds are fixed on what can be done with the remaining moneys already voted. Of course, the constitution can always be amended in the way you describe. And back of that is the fact that the legislature can make an annual appropriation to do some particular thing, so that the power would always exist, first, to amend the constitution; second, the power would exist with the legislature to appropriate a limited amount. My impression is that the constitutional convention would not consider it. Let me also call your attention to the fact that the time has passed for the introduction of any new proposed amendments except by unanimous consent.

MR. BRENNAN.— Our meeting is now over. Some of you I hope will be able to remain the afternoon, possibly longer, and view some of the scenery and have a good time here at Niagara Falls.

Meeting adjourned.



STATE OF NEW YORK
DEPARTMENT OF HIGHWAYS

PROCEEDINGS
OF THE
FOURTEENTH SEMI-ANNUAL CONFERENCE
OF THE
STATE COMMISSION
AND

County Superintendents of Highways of
the State of New York

UNDER THE AUSPICES OF THE
STATE DEPARTMENT OF HIGHWAYS
AT ALBANY, JANUARY 25-26, 1916



ALBANY
J. B. LYONS COMPANY, PRINTERS
1916

the 1990s, the number of people in the UK who are employed in the public sector has increased by 1.5 million, from 2.5 million in 1980 to 4 million in 1995 (Department of Health 1996).

There is a growing emphasis on the need to improve the quality of care in the public sector. The Department of Health (1996) has set out a number of key objectives for the public sector, including the need to improve the quality of care, to reduce waiting times, to improve the efficiency of the system, and to improve the financial performance of the system. The Department of Health (1996) has also set out a number of key principles for the public sector, including the need to be patient-centred, to be transparent, to be accountable, and to be efficient.

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PROCEEDINGS OF THE FOURTEENTH SEMI-ANNUAL CONFERENCE OF THE STATE COMMISSION AND COUNTY SUPERINTENDENTS OF HIGHWAYS OF THE STATE OF NEW YORK

Meeting called to order by Deputy Commissioner Benjamin J. Rice, in the hearing room of the State Highway Commission, January 26, 1916, at 10:30 A. M.

Mr. Rice.— I believe this is our fourteenth semi-annual conference of county superintendents, and I wish to say that I consider it a great honor to be able to preside at a meeting of this kind, made up of men from all parts of this State, representatives of your boards of supervisors. I have prepared a program for this morning, but have been disappointed in it; the Commissioner and the two deputies were to speak to us this morning. The Commissioner has been called over to the Capitol, but will probably return a little later. Mr. Breed is sick, and perhaps will talk to us to-morrow.

I wish to say that I want to congratulate the county superintendents upon the conditions that I found in the counties this past year. I had the privilege and the pleasure of inspecting every county of the State; I was in 753 out of the 932 towns in the State, thereby gaining a pretty fair knowledge of conditions in each county. Taking into consideration the fact that the past year—or the months of July and August, were very hard months owing to the heavy floods in certain parts of the State which caused great damage, we found the conditions even at that very creditable to the counties; and I trust that this coming season the conditions will continue along the same lines.

A speaker who is to follow me has figures on certain things in connection with the highway work which he will give to you, but I do wish to mention the fact, in connection with the bureau of town highways, that we have built 670 miles of completed town macadam roads this past season; built by the bureau of town

highways under the county superintendent. We have also built, in round numbers, 400 miles of gravel roads, which, as you can see, is a big showing for this department. I think very few people throughout the State realize the amount of improved construction which is being done by the towns.

In our program this morning we have two men who are to give you a brief history of the bureau of town highways, its development from the start up to the present time; and I now take pleasure in calling upon Ira P. Cribb, district supervisor.

Mr. Cribb.— You people who know me best know that I never in my life read a paper — well, I will admit that I did on one occasion try to read one, and as I stood before the audience I got scared and had to lay the paper down and in a measure go it alone. I hope you won't get scared because I hold in my hand a paper, for if you do I will feel like the boy who was fighting; he was on top of the other fellow and holding him down, and out come the teacher. "Look here, Johnny, haven't I told you to always count a hundred before you let your angry passions rise?" "Yes," said Johnny, "you have; and I'm holding him right down — I want him here when I get through counting." So I hope you will all stay here. The fact is, the town bureau has done so much that it is impossible for anybody to tell the conditions all the way through. I am going to endeavor to read the second paper, because I want the statements to be correct.

DEVELOPMENT OF THE TOWN HIGHWAY BUREAU

IRA P. CRIBB

District Supervisor

To begin with the organization of the town highway bureau and follow it carefully up to the present time, and present in detail the work accomplished, would necessarily take more than the time allotted to me this afternoon.

The work of the bureau became necessary in 1905 from the fact that State aid paid to the towns then under the money system was expended with no State supervision of the work performed, or material used for road and culvert construction. The money was

received by the towns and expended by the town superintendent with no system of accounting and no system of road improvement.

To-day we can hardly appreciate how small the town highway bureau was at first. The only officials during the first year were a deputy in charge, on stenographer from the State Engineer's office to assist when necessary, and two field men, of which I was one. We had an appropriation of \$15,000 to pay all the expenses of the bureau which included salaries, traveling expenses, stationery, postage, printing, etc. The work increased rapidly from the very first and it soon became necessary to increase the office force and the number of field men. This State organization, together with the county superintendents, town superintendents and town boards of the State, compose the working strength of the town highway bureau.

The statute of 1903 provided for the appointment of county engineers by the boards of supervisors. Only a few counties made appointments under this statute. The statute of 1909 provided that each county must appoint a county superintendent or in case no appointment was so made, a superintendent would be appointed by the department. Also the statute of 1909 placed every town in the State under the money system and provided it with proper assistance from the town highway bureau and the county superintendents. It is my desire at this time to present the work accomplished under the management of the town highway bureau since its inception in 1905. Our town bureau has jurisdiction over about 74,000 miles of township roads, and every town through which these roads pass is expending money furnished by the State. Hence the need of State supervision. The construction and maintenance bureau has already constructed about 6,000 miles of splendid State and county highways and has a tremendous amount of work ahead of it.

How do these bureaus work together? The roads constructed under the management of the county and town superintendents are built in sections that will so far as possible connect with either a State or county highway. It is the intent of the town highway bureau to make improvements of this character either of gravel, macadam, slag or cinder on such roads as will accommodate the greatest number, and to build them wide enough and heavy enough to carry the traffic.

Let us consider how the money for this class of road improvements is obtained. Each town in the State provides a given sum of money, which is determined by its town board, for highway improvements under item one, known as the "Highway Fund." Under the graduated scale, State aid is paid to each town as provided in section 101 of the Highway Law, and in no case may the amount of money provided by the town, added to the amount received from the State be less than \$30 per mile. I am glad to state that, at this time, the towns of the State are inclined to raise every dollar possible upon which State aid may be received and to provide for permanent improvement by reducing grades, widening and making safe the many narrow places, building substantial culverts, constructing macadam or other hard surface roads.

In going over the roads in different parts of the State and especially in the western part of the State where I am more familiar with them my sympathy is generally with the town superintendent of the inland towns where the assessed valuation is very small. Even though State aid received equals one dollar for each dollar of assessed tax, yet many times the whole amount of money available is so small that no marked improvements can be made in any one year. However, there usually is one advantage in towns of this character. The land is usually rough and rocky but, nevertheless, presents a natural soil that is much better suited to road purposes than that found in many of the towns having a greater assessed valuation. Then, too, roads built in these towns do not usually have as heavy traffic as those in more valuable locations.

But little is ever published in regard to the work of the town highway bureau, it matters not what the work may be, whether it is the construction of macadam roads, gravel roads, reducing grades or building bridges. Go where you may, and generally, if anything is said about road improvement, it will be concerning the State and county highways. It is because of this that so many people are unfamiliar with the work of the town highway bureau. Therefore, it is my desire to present the conditions briefly in order that all interested in the improvement of the highways of this State may realize the importance of this bureau, and how it is ready to extend every aid to local officials and to judiciously expend every dollar appropriated. When considering that the State system of

highways, including the roads built wholly by the State and those built by the State and county, cover over 6,000 miles at this time, do the people generally give the town highway bureau credit of having built about four thousand miles of macadam roads that are in use to-day as township roads? This number of miles is shown on the maps in the Albany office to-day, as filed by the county superintendents of the State and approved by the district supervisors. The macadam roads that were built years ago and have received no maintenance, having been considered not good enough to be included as a part of the macadam road system under the town highway bureau are not included in the above 4,000 miles. Neither does the mileage here presented include macadam township roads that were built years ago and have since been taken over by the State as part of the State and county system.

In addition to the macadam roads under our bureau there are several thousand miles of first class gravel roads. In estimating our gravel roads we do not include short strips of a few rods here and there in different sections of a town. The gravel roads we show are those of a permanent character of improvement and which connect with the system of State and county or township macadam highways. This form of road improvement might well be termed a hard surface road. They are not the main thoroughfares of the town and have been constructed where it was impossible to build a township macadam road, in some instances for want of money, and in others where first class gravel was near at hand and the road could be constructed much more cheaply than a macadam road. These roads are generally satisfactory to the people from the fact that a good road is provided throughout the year. Contrary to the belief sometimes expressed by those unfamiliar with good roads, they do not break through and rut up in the Spring and Fall months and will at all times carry the loads equally as well as the township macadam roads and in nearly all instances they connect with town or State roads.

There is still another improvement known as the permanent culvert work. I am unable to state the number of permanent culverts that have been placed in the State during the last few years, but can assure you that it is many thousand. When speaking of permanent culverts I mean the steel culverts with concrete head

walls, the cast iron culverts with concrete head walls and the substantial concrete culverts. It was no easy matter to get rid of the old plank culverts and in no place in the State could one travel any great distance a few years ago without the rattle of the planks over which they rode. They have served their time and gone. One can travel from Albany to Buffalo and not find one of the old time 12, 14 or 16 foot plank culverts. Not only have we provided a means by which water can be taken from one side of the road to the other, but we have built culverts from 20 to 30 feet in length, making sufficient width for vehicles to pass on a culvert the same as in any other section of the road. This improvement has lessened the expense of road maintenance since the cost of maintaining culverts has been reduced to a minimum by the substitution of the permanent constructions.

Another class of improvement in road work can easily be seen if we compare the width of the earth turnpike of today with those that were seen fifteen years ago. Nearly every earth turnpike on main roads has been widened to the standard width with proper crown and correct drainage. In towns where this class of roads has received careful attention from early spring until fall they have proved to be quite as satisfactory for all traffic during the summer months as the more expensive class of highways. Many improvements also on these roads may be seen where grades have been reduced and especially the narrow dug ways widened and properly protected by guard rails, etc. Also the earth roads, known as second class, many of which are cross roads, have been cared for and in general are kept in good condition for the traffic.

I am unable to give the number of miles of improvement made by the use of slag or cinders. However, I can state that in some sections slag has been used in place of crushed stone to quite an extent and in other sections the base has been constructed of field stone and covered with slag. Not a large mileage of this class of road has been constructed, but the short sections already built have stood the traffic during the last year and came through the winter in good shape.

We have considered the different kinds of improvements made under the town highway bureau but there are still others not mentioned that are of great importance. I refer particularly to the bridge work which in some sections of the State is of no mean

proportion. Nearly all bridges have been built by the towns in which they are located, with a very few exceptions, where the county has assisted in such bridge work. When we speak of the State highways built wholly by the State or by the State and county, we almost forget that the road would be useless without the work of the town highway bureau in the construction of the bridges, and which are built at the sole expense of the town. Generally speaking the bridges are built by the town under the supervision of the county superintendent and the time has come when contract work for bridge building is almost unknown in the State, except as applied to the class of structures whose size render it impossible that they be built by the town.

When we compare the results obtained by the town highway bureau and consider the source from which the money comes and then compare the work of other road improvements of the State we are almost amazed to realize the actual conditions as they exist. Now, how much do we have generally speaking for highway improvement not including money for bridges, machinery or miscellaneous purposes? In 1914 the average money, for each mile of highway in this State was about \$78 and, with the exception of the amount paid by the State as State aid, was paid by the tax payers of the different towns and generally speaking the tax payers of these towns are glad to contribute toward the improvements of the roads in their towns as much money by way of taxes as is necessary to at least meet the amount necessary to draw the limit of State aid in that town. Let us briefly sum up the work that has been accomplished by the town highway bureau in this State. First, the building of 4,000 miles of macadam roads; the building of several thousand miles of gravel roads; the improvement of the culverts; the widening and standardizing of the earth highways; the reducing of grades; the widening of turnpikes; the perfecting of drainage; the installation of thousands of lineal feet of tile; the erection of guard rails and the construction of bridges.

In addition to all this a large majority of the towns have purchased road machinery, which they would not have otherwise obtained, by paying for the same from item one as provided by statute.

These accomplishments coupled with all that has been done by

the construction and maintenance bureau of the highway department, makes New York the banner good roads State of the nation. No other State has expended so much money, has so many miles of improved roads, and has such excellent dirt roads as New York.

It is not unusual to hear criticism of the roads of our State. This should be welcomed. It is a good indication. Wherever you find criticism there is something stirring. You hear little criticism in a graveyard and it makes no difference whether it is an old fashioned one grown up to burdocks or a modern one planted with evergreens and rose bushes. Why? It is a dead place. This healthy criticism shows that the Empire State is alive to the value of good roads and it is the good roads which make the people alive to the bad ones. It is only the people who ride on good roads that know how to kick over the bad roads. Hence, the more improved roads we build, the louder becomes the wail over the poor roads. So let us profit by the just criticism, overlook the unjust, and work together for the further development of the greatest State system of improved roads known to the nation.

Mr. Rice.—I see that I made no mistake in calling on Mr. Cribb for a few remarks in regard to the bureau of town highways. We have with us a county superintendent whom we have missed in our meetings for the last two years, and I have called upon him to follow Mr. Cribb; and I am very much pleased to have with us today our friend, Mr. J. Y. McClintock of Rochester.

Mr. McClintock.—I am impressed with the bigness of the figures that Mr. Cribb has given us, showing what the town work means in the aggregate. It is perfectly tremendous when they tell us that this bureau has supervised the past year and the year before eight million dollars worth of work, spread over 70,000 miles of road. Thinking back a little, we were throwing up our hats when we got an appropriation of \$50,000 from the State to begin road building and we thought that was a big thing. Now we think by millions; in fact, since the war began, we think by billions.

Among the things that interest me is the fact that nobody yet knows what the perfect road is, and the work that the town men are doing, the building of these town roads, while they may not be the perfect road, it may be that they are the foundation for the

roads of the future. The difficulty, as I see it, as I guess we all see it, is not that the roads break through — any of us can build a road that will hold up the load — but the difficulty is, when the automobiles come, about holding the top down. I have been building on one line. It may not be the best, but if we all do the best we can, we will get some results that will be noticeable. I am pleased this morning because the commissioner has told me we might go ahead on this line. In Greece, the largest of our towns, where they spend \$25,000 to \$28,000 a year and raise more money than the State meets in State aid, we are going to take 8 miles of the town-built macadam road — originally built the same as most of you build your stone roads, sometimes 8 inches thick, sometimes a foot, varying with the character of the soil, but the road shaped up pretty well, and the two pieces reach three different stations that have very heavy freight traffic, the fruit goes out of those stations by the thousands of carloads — it is a big fruit country. The town roads have had to be resurfaced with broken stone twice, some portions of them, on account of the wear. Now the State is going to give the town a contract to take this 8 miles of town road, built at about \$3,500 a mile, and simply smooth them up and put down these cubes that one of my influential friends says I am batty on. (If you talk long on anything, they call you batty.) They are going to do that and take it over as a State road, 8 miles of State road, — a good large demonstration of the fact that these roads we are building in the 950 towns are an important addition, more important perhaps in the future than the State roads now being built. It encourages me immensely. In fact, lately we were impressed in Monroe county (and Erie too; because I don't do anything in Monroe without being interfered with by Erie county) — but anyway, I am impressed with the immensity of the whole subject and impressed also with the necessity in solving the problem to have the enthusiastic aid of the town people, the individual towns. I see some young fellows take up the road question — a good many of them born since some of us have been in the road business. They don't want to consider details; they want to dispose of the proposition by States at least; or consider New England as a whole, or the coast States as a whole. But I find the longer I am in it that there is enough for one man in one

county, if you will put your wits on it and cultivate the possibilities.

That leads up to this, that even in one town I have got into the habit of depending on the town boards and often I find they know more than I do, their judgement in a given case is better known than mine. That leads to this, that if we could present the subject in such form that the local communities could study it and get their small part, get that right, they would do better than I could if I got perfection in one town.

This spring we put out a county report, different than usual, and we carefully sent out a number of copies, not to brag on what we could do in Monroe, because they are especially generous there; the city pays about 85 of the county tax and they are pretty liberal-minded people. They are just as proud of this county report as if was an advertisement of the city; they consider it a good advertisement of the county. We put the pictures in of the fellows who have to take the local responsibility. Put the maps in with the colors so that any man who wants to know the subject has no excuse for not knowing it. If he wants to discover how the town board and the town superintendent is going to distribute his money during the coming year, it is right there before him if he will sit down and look for it. They can ask questions and plan out consecutive improvement instead of spreading money in spots which do not connect. Finally we will have the county in the lead in general improvement. We did not send the report to brag — but we drew out expressions from some of the most experienced road builders in the country; for instance, Samuel Hill, one of the most influential men in the road business in the country, who lately has been instrumental in building the beautiful road up the Columbia river, and who was so much interested that he took the engineers off to Europe and rolled them around Europe so they could discuss everything they saw and see points applicable to that road. Then they built the road, and it is a wonder. The most traveled man is the one most impressed with what they have done. Sam Hill says the report is beautiful and that there ought to be such a report in the United States for every county. If it is good for Monroe county it is good for others.

Instead of attempting to treat this subject by States, put it

down so that individuals can handle it and then we will get something worth while. Yesterday I talked with Mr. Rice on this subject of local application, for instance, the report of 1914 of the department, a good report but when you want to know anything about town work you hunt through — by the way, it is not very well indexed — you find a certain number of pages devoted to oiling roads. Interesting subject this year; but the fact of what is done this year in oiling won't amount to much a few years hence. It is only the cost per gallon or yard. In that space, the town business could be covered. When you look for the work done in the towns, it is not there. The details they take the pains to furnish, or they insist we shall furnish, are not worth printing. I do insist that the stuff is worth while our collecting; for instance, each individual road in the town that is built represents the result of energy on the part of the local man and it should be preserved and recorded. If that report was made so that every town record would be printed in the State report it would be beneficial to all of us in every way. It would arouse more interest and give us information. For instance, lately the mayor of New York objected to this appropriation by the State for the aid of up-country men, farmers, scratching their dirt roads, etc. He didn't have any more idea of what the town work is than the man in the moon. One reason is the lack of presentation of it by the department. When Mr. Rice objects to the size of the book it would make, I respond that it would be wise to make the thing in two volumes. Two years ago Mr. Washington went to Europe and made a mighty interesting report; it made a number of pages and a lot of pictures, but the department instead of incorporating it in the ordinary report made a special volume of it. I think, myself, that volume is of more value in many ways than all of the rest of the reports for years of the department. I have suggested to Mr. Rice that it would be well worth while considering issuing the department report in two volumes, making one volume with the town material in it so that we can always have it. I hope if you folks think the same way you will tell him so, because he is susceptible to moral influence, anyway. I don't think of any more now.

Mr. Rice.— I assure you that we will consider Mr. McClintock's remarks. While a little late for this year's report, I think that

another season perhaps, with his help, we can get out a report such as he suggests. He has accused one or two counties, Erie in particular, of stepping on Monroe county's toes. I feel that it is due, perhaps, to Erie county to give them a chance to defend themselves. I would like to hear from Mr. Diehl.

George C. Diehl.—As a resident of Erie county, I am perfectly willing to concede that everything he says is true. I am even willing to concede that it is true you yourself are susceptible to moral influence. I am also willing to concede with Mr. McClintock that he cannot offer that moral influence but has to call on the rest of us.

It is very pleasant indeed to me to hear that Mr. McClintock is going to build those eight miles of cubes in Monroe county. I have great confidence in those and I am glad that he is batty on that subject. Every man ought to have a hobby; one who has not and thinks rationally on every subject is hardly human, and it is no fun associating with a man, and you don't get any benefit, who has no red blood in his veins; and that is why I like to go over to Monroe county, and make every excuse I can to go there.

There is co-operation between Monroe and Erie counties; there is co-operation between Buffalo and Rochester. There ought to be co-operation between all the county superintendents in the State, and if I may criticise our movement, the fact is we have not had enough co-operation between the various counties of the State. We have been inclined when we wanted something for our particular county to possibly get it at the expense of some other county. The particular thing I have in mind at present is this: as you gentlemen are aware, there was last year a great deal of discussion before the constitutional convention about taking surpluses from State roads from some counties and giving it to others. Irrespective of the merits of that case — which I am not going to discuss here — in presenting that matter to the constitutional convention and presenting it now before the Legislature, there is a great deal of discussion along this line; that that county has had too much road, they don't need any more. These are main State roads that connect the main routes of the State; those are county highways, of local importance; the State as a whole should look after State highways and not pay much attention to

the counties. Those arguments were advanced by men from the different counties of the State. The result is there is a bill introduced in the Legislature by Mr. Kelley and that bill proposes to repeal the State aid to town highways; it proposes to repeal the State aid to county highways; it proposes to repeal the State aid to maintenance of county highways; and the State aid to the maintenance of county roads. That is a logical result of forty counties working for one thing and thirteen for another, and then saying that these things are merely of local importance and the big counties do not need help. Don't misunderstand me and think I am trying to determine the other issue here. But we are working in Washington on this national legislation — Mack's dreams about billions of dollars for good roads has ceased to be a dream. To-day they are spending 350 million a year in the United States. We got introduced in congress this year a bill that has the support of the post roads committee in the senate and the roads committee in the house, appropriating money and sending it out to states in proportion to population and mileage. The fellows are saying the same thing — mud road statesmen; they do not realize the work being done.

To get back to the other subject, the point is, as long as we all stood together we didn't have a particle of difficulty in passing the first fifty million, of getting a unanimous vote in both the senate and assembly for the second fifty million; but the moment we start getting apart, then the New York city man comes in, as Mayor Mitchell and this assemblyman and say they don't want to help those counties in purely local concerns. Therefore it is of the utmost importance that the matters advocated receive as far as possible the unanimous support of everybody. The things we are not unanimous on we might better pass by, and support those we can all agree upon. I personally, believe that a greater degree of county and town autonomy is of benefit to the road movement; I believe that through the time of stress several years ago when the highway movement was being criticised by everyone on State and county highways — very little on town, I believe — when there was such criticism and danger of the good roads movement falling by the wayside, the thing that made the people stand by the good roads were the county superintendents of highways throughout

the State, who, through their boards of supervisors and town superintendents presented a close point of contact through the State and made them realize and believe in the good roads movement in spite of criticisms, many of them well founded. Therefore I urge upon the county superintendents of the State, for the good of the town highway game, for the good of the county highway game, and for the good of the road game all over the State, that you co-operate with one another; that we work together; and we have got an organization started and it is not for the purpose of antagonizing anybody or any organization, but just for the purpose that we can work for a common good, that we are to pull together, and not a few pulling one way and a few the other, because the minute you start the opposite influence then the balance of power lies in the more densely populated communities in the metropolis that is apt to cut off the State aid. They want to cut it off at once; they are very impatient.

It is always a pleasure to come to these county superintendents' gatherings and there is not a road meeting I go to any place that is as close to my heart. And I hope we fellows will all stick together and pull together and get a town and county and State system of highways that the rest of the nation can copy, and that we will continue to receive the support of the cities of the State as we have in the past. That we can only get by co-operation.

Mr. Rice.—That was a special number, and I can see that we made no mistake in calling on Mr. Diehl at this time. I am sure that the proposition of standing together, co-operation between each county superintendent, and counties and towns, is the solid rock that we should stand on. He has explained to you some of the difficulties that we are liable to run against in this coming Legislature. You gentlemen can appreciate what that means. If the bureau of town highways and the maintenance department, and along down the line, loses the aid of the State in maintaining and building highways, it will be a calamity.

Now there is one thing that we are always going to have with us, and that is the question of maintenance of State and county highways; a big problem, and still growing. We have with us to-day the second deputy, and I take great pleasure in introducing Mr. Sarr, who will talk to us on maintenance.

Mr. Sarr.— When Brother Rice asked me to help fill in in the show I thought I ought to out of courtesy to him, but I did not feel that the matter would be especially interesting to the county superintendents and that I would hesitate to give any advice, or attempt to talk on the county and town highways. The only thing thing I wish to say is, I don't know how you do it. I can't help but note and appreciate the improvement in the general condition of town highways throughout the State in the last eight years or six years, since the town superintendents, the town organization and the State highway department has been perfected and worked out along the lines that have been thought out and are apparently bringing results.

We have spent during the past year about four million two hundred thousand dollars in the maintenance, repair and reconstruction of State and county highways. We use those words approximately, without the thought that they mean something definite or that they all mean the same thing. I have thought that each one of them had a significance.

Maintenance: the idea of keeping a road up to a standard by constant attention. Under that item, for expenditures strictly along that line of maintenance, consisting of the material, the patrolman uses and the oil treatments, we have expended about \$365 per mile during the past season.

Then under repairs I would classify the work of bringing back to a standard roads that had deteriorated either by neglect, but principally by the effect of the winter season, the freezing and thawing and sliding of banks and washing of high water — all those things we classify under repairs. Segregating the expense into that item we find about \$175 per mile is chargeable to that class of work.

Then comes the resurfacing or reconstruction. We have maintained these roads and repaired them, but in spite of that work we find some roads cannot be kept up; they keep deteriorating and wearing away until in some instances it is necessary to put on a new top also of two or three inches of the same type of construction. Or where we have given that treatment two or three times, perhaps, since the road was improved, we have decided that a more expensive type is necessary and we have reconstructed the road

of different type; perhaps with brick or concrete or what we call mixing method bituminous macadam. The total expenditures under those items has amounted to practically \$250 a mile on the 5,800 miles in the State. During the past year we resurfaced 297 miles, reconstructed at an average cost of \$5,000 per mile. We surface-treated with one surface treatment, a light oil treatment, with cover of sand or gravel or stone chips or iron ore tailings, or whatever is available — we gave that treatment to about 2,000 miles of highway, at an average cost of \$440 per mile.

About sixty per cent of the total expenditure was performed by contract, advertised and let to the lowest responsible bidder. The other forty per cent was taken care of by patrolmen, and the repairs and the furnishing of material and the supervision. Supervision, by the way, cost about seven per cent of the total expenditure, including the salaries and traveling expenses and the preparation of maps, plans, and general supervision.

The question of oiling — or these light surface treatments — is one that everyone seems to be interested in; that is, from the number of letters of complaint we get during the summer season, and it is one that we have given a good deal of thought to and have tried to find out what other states are doing, and so far as we have been able to learn, this cold oil or cold tar treatment with a light cover is the method that is being generally followed. As a palliative treatment, to carry the road from season to season, it seems for the money that can be expended, to give the best results.

It has been suggested that the roads might be closed up during the period of oiling, but, while we do not advertise that very much to the public in general, we find that we need the auto traffic on the road when it is in that sticky condition to get the result. The kneading action of the rubber tires, working the oil and stone together and working it into the macadam — the really good tops we get are those that have the heavy auto traffic during that period. If we should shut up the road while that oil was drying out, I insist we could not get the value for our money.

I notice that in a number of counties the counties have taken up this work of oiling so that perhaps my conclusions on this subject might be of interest; and those are, that it does not seem hardly worth while to oil a road where iron-tired traffic predomi-

nates; that the iron-tired traffic tends to grind it up instead of kneading like the rubber, and, instead of packing it down, keeping it exposed and keeping a more uneven surface. The more uneven the surface is the more area there is and the more area, the faster the volatile oils in the asphalt or tar products that are used, the faster they evaporate and the sooner the material goes dead or oxidizes. I question the economy of oiling roads that do not have excessive motor vehicle or rubber-tired traffic. The effect of the rubber tires was apparent to me this summer on one stretch of State road which, while it had auto traffic in quite considerable amount, it was not congested and autos made one track through the center, and the wheel track was perhaps two feet wide on each side; but after the road had been oiled, in the spring of 1915 there were two streaks of very good surface about two feet wide, and in the center there was a streak of bad material and on the sides a streak of bad material that as the season advanced ground up and worked into dust and blew away. In the middle of the summer when the road was oiled again there were just those two streaks; they were in very nice shape, smooth and hard and dense. It confirmed the idea I had already formed, that it needed the rubber-tired traffic to knead and work the oil into the stone and into the old surface, to get the best results.

Another thing, on surface treatment with oil or tar, on a waterbound macadam road. Waterbound macadam wants to be waterbound in order to keep together, to be knitted together. First we roll it and fill it with the fine fragments of stone, and roll it and get it in condition to withstand traffic, but it is finally made and hardened by the traffic and by the silting of the fine dust which is ground up by the traffic, by the showers and rains, until the macadam is finally dense and hard like this table and will shed the water off. When we first started in the specifications carried an item that the road should be sprinkled at least once a day for thirty days. In those days we followed that practice, and I came to the conclusion it was a very material item in the construction of waterbound macadam. I have walked miles behind a sprinkler watching the effect. When first finished, the water from the sprinkler would go into the road at once where it fell; and in the course of a week the water would commence to run a little toward

the shoulders; in the course of thirty days it would run clear off to the sides.

Of course, another factor, after the road was silted up, was keeping it moistened. I suppose even after silted up there is still some minute openings that water finally followed up and was moist where there was no apparent water; there was moisture in the minute pores. Put a brick in water and it will absorb a certain amount of moisture, and yet if you break it up you could not find water. The same with waterbound road; it has to have moisture to hold together, even when silted up so a pail of water would run off to the side. That is waterbound, to my idea.

Now you put on an oiled surface and the oil surface sheds the water and it runs off to the sides. The moisture gradually seeps out of the bottom and eventually the road gets dry during the summer and punky and shaky, as I call it. What I want to bring out is that after you have oiled it and that condition is reached of not taking any water from the surface and the water seeping out from the bottom, the road gets in a condition that it is easily kicked apart if you don't keep the oiled skin intact on the surface. So that with a waterbound road you have got to treat it more often and keep at it, for by neglect just as soon as the oil is worn away on a particular spot that spot is likely to start raveling, and when it does it will go faster than it would on a waterbound road that did not have a treatment on the surface.

When I came down here last spring the question of patrolmen — there was a general idea that the patrolman was just a political plum; paying out State's money and not getting much for our money. I hesitated a day or two, thinking of perhaps abandoning patrolmen entirely, but it seemed rather a radical change to make and so I recommended to the commissioner that instead of doing that we try out in certain sections the abandonment of the patrol and substitute a gang working in a systematic manner under a foreman. That would seem could be worked out very nicely from some town where a number of roads radiated; for instance, the city of Watertown I think has 7 roads radiating from the city, and the city is small, don't take long to get to the outskirts of the city from any point. The gang could work economically with a motor truck; we planned to go out not to exceed 15 miles; to try that with a wagon would take too much time each day making the

trip each way. So in maybe eight or nine places in the State we selected, and the patrolmen were left off and the gangs installed. We found the work was performed in a more intelligent manner and better results were obtained, apparently at a less expense, where they were working; but the fact was that the other roads were being neglected, and a trip through the territory where the gangs were installed and the patrolmen left off convinced me that the patrolmen really accomplished something. Here was a road with every little way a hole two feet square, top course all raveled. They would go to the division engineer with the report and would be informed, "Why, the gang was down there four weeks ago and patched it all over and it was in good shape." But they hadn't been there in four weeks, and the little holes started and became large holes.

So I told the commissioner that in our driving along over the roads and seeing the patrolmen, seeing them driving, in our inspection we have a few symbols we put down: "P. V., patrolman visiting; P. D., patrolman driving; P. W., patrolman working" — well, in driving over the roads, the general impression was that they are not overworked, but at the same time we did not notice the result except by comparison with other roads where there is not a patrolman employed. This was also apparent the past season on roads where we had contemplated or had already advertised and placed a road under contract for resurfacing and where the work of the patrolman was stopped — no use spending money there, as we were going to resurface it — along in the middle of the summer some of those roads you could hardly go over them; while in the spring I went over the same roads which had been patrolled the season before — some of you may drive between Canandaigua and Rochester and will appreciate the road I speak of, immediately west of Canandaigua. This road between Canandaigua and Victor was all about in the same condition. We only had money to resurface four miles; we placed that under contract; and the other six maintained by patrolmen. The latter was better in the fall than in the spring, and just the minute you came to the place where the contract started you had to slow down the auto to a walk almost. So, as I have told the commissioner, I don't know that we get 50 per cent efficiency, but there is quite a little satisfaction in thinking that there is somebody on the job all the while at only a small expense.

Another thing that I had thought some of and what I first thought of talking to you on was why the repair work (perhaps not the work done by the patrolmen, but the work that we spend \$175 a mile on; that would be, in the State, pretty nearly a million dollars), why that work could not be done by the county or town organizations. It seems a shame here that in the towns where they have town organizations and a town man skilled in repair work and the care of highways, that we should have to go and pick up men that do not know anything about that class of work and perfect a separate organization, where they have a corps of drilled men in the town who are experienced. Along the middle of the summer you go out to pick up men to do laboring work, and what kind of a man do you expect to get? If he was good for anything, he would have a job. It is not that way in the town work; the town offers men employment the season through. It appeals to men who follow laboring work, and men working for the towns are much higher class laborers and foremen than we expect to get in picking up temporary crews around as the occasion requires in doing this extraordinary or repair work, generally in bunches, spend a little money may be in a certain place, building a retaining wall or removing a slide or repairing a washout, or a special treatment for a short stretch of road. That money goes in chunks. We just had to approve orders for expending \$4,000 for protecting a road in Cattaraugus county, on only 150 feet, with a large stream almost to the edge of the macadam. The road was only improved last year.

I don't know how that would appeal to you, but in Steuben county we worked that out last year; we did not appoint any patrolman and practically all the work was done with our organization on payroll basis; was performed by the town superintendents under direction of the county superintendents. I think we must have spent 30 to 40 thousand dollars in the county in that manner. While I question the advisability of doing away with the patrolmen entirely, I thought we obtained excellent results in the work that was performed, better than in the other counties where we picked up temporary gangs. I thought perhaps of recommending a law that would make it mandatory for the towns to perform the work on the call of the State Highway Commission; but I appreciate that we might work a hardship,—that the town superin-

tendent has his own work laid out — if it was mandatory and we called on him to break up his other work. So I can see difficulties in working the two in together; but it does seem a shame, as I said before, that in a town working on the money system and where they have a town organization working the season through, and the work appeals to the men and they are unquestionably a higher grade of men than those picked up in the middle of the summer, unemployed at that time. I would like to have you think it over and I would entertain propositions to extend that from any county organization, extend the practice that we had in Steuben county last year.

I don't think of anything more, unless somebody would like to ask a question along this line, the performance of the work by the county or town organization. I don't think our system in Steuben county was perfect. My idea in working out some such system would be a member of our department would have to be patrolman constantly and advise the county or town superintendent of any little defect that was coming in a road and have it attended to by a man or two men, or something like that, rather than waiting for the gang to get back.

Mr. Creiger.—Will you explain the Steuben county system a little more fully to us?

Mr. Sarr.—Well, the plan, as I understand it, was that the division engineer or his county assistant — I imagine the orders came from the division engineer, would advise the county superintendent of the repairs that he proposed to have done on a certain road. It was not left discretionary with the town or county superintendent as to what work should be done; that was determined by the State highway department or by the division engineer's office. Then the division engineer's office sent out a man who obtained the signatures of the town superintendent's crew, etc., and the financing was all handled by the division engineer's office. There is one bad feature of the thing that I do not see how we can overcome, and that is the slowness in the department in paying the labor. There is so much red tape to it that it is hard to break into. These established rules and the laws require a certain procedure, and if the proposed modification of the law is put into effect, that is,

keeping the money all in the State treasury instead of putting it in the hands of the county treasurer, then it will have to go through all their offices. As it is now, when the payrolls are approved the drafts on the county treasurer are mailed immediately back to the division engineer.

Mr. Rice.—Are there any other questions you would like to bring up this morning? If not, we will stand adjourned until 2:30 this afternoon.

Afternoon Session, January 25

Mr. Rice.—The subject discussed the last thing this morning was in relation to the oiling of State and county roads. I think this bureau has used considerable oil in different parts of the State, and we have some gentlemen with us here who have made it a study; the building of gravel roads and the oiling of the same. I take great pleasure in calling upon Mr. John E. Hodgman of Saratoga county to discuss this subject.

Mr. Hodgman.—I am a good deal in the position that the Russian army was at one period of the present war: I have shot away all my shells. I have discussed this thing for two years in succession and I don't know what I can say to you now that I have not said before. We have used in one of the towns in my county this year about 30,000 gallons of oil on gravel roads, covering about 100,000 square yards, and we have always got excellent results; in fact it is my opinion — we have been oiling the roads there about four years — it is the the most economical proposition in the maintenance of gravel roads. Our process, as I told you last year, is to get the road into good cross section, thoroughly sweep it, and then use light cold oil. We have always used what is known as the standard No. 4, an oil that contains about forty per cent asphalt. We use .3 gallon to the square yard, under pressure; blot that with screened gravel very lightly, and open it to traffic. No matter how dry — I remember a year ago last summer a period of two months of no rainfall — the roads never break, and after severe rain storms we had no mud. We made some experiments with a heavier oil when we first started the oiling proposition,

using the sixty per cent oil, warm. We did not get as good result with that as with the cold. We understand this year in Rensselaer county the department have built some gravel roads, using heavy asphalt, put on hot. I understand the results were not good. The county superintendent of Rensselaer can probably tell you more about that than I can. We have had excellent results, and have had a nice lot of roads. If there are any questions you might wish to ask that I can answer, I will be glad to.

Geo. E. Schaefer, Livingston county.— How often do you apply it?

Mr. Hodgman.— Once a year.

Mr. Buck.— Now to the counties in the central and western part of the State this is almost a new thing, that is, the idea of making a permanent improvement in this way, and I wish you would tell these county superintendents what to guard against, on what character of soils and qualities of gravel they would fall down — about your failures, if you have had any.

Mr. Hodgman.— I would not advise the use of oil on any road that is surfaced with shale.

Mr. Buck.— How about the subgrade? On what subsoils, if any, would you advise against it?

Mr. Hodgman.— All the subsoils I have used it on have been of a sandy nature. We have one section of gravel road about thirty feet wide running for a mile through swamp. The gravel on that road is about twelve inches, put on two six-inch courses and rolled, and we have had no trouble there, or anywhere where we have used it. One or two other towns in my county used it to a small extent this year. You remember we had a rather heavy rainfall through July and August, fourteen or fifteen inches of rainfall. I watched those oiled roads very carefully and I have never yet seen during that continuous rainfall any muddy condition. After a series of oilings, after two or three years, a crust, you might call it a roof to the road seems to form over the road, which is impervious to the water. Where a slight depression exists and the water pools, it does not get into the road. The sun comes out and it evaporates.

I have never used it on clay roads, but I imagine if the subgrade was clay and sufficient gravel was placed over it, I don't see where there would be any trouble. We have nice quality of gravel, with very little clay mixture. The gravel in Saratoga county, the binder is mostly red oxide of iron. How it would take with a larger mixture of clay, I don't know, but am afraid it would fail.

C. J. Allison, Rockland county.— Have you ever used sand? I took Mr. Hodgman's report last year, and we put down several miles this summer; 7 miles with screened Tompkins Cove crushed stone, $3/8$; and we put down $3\frac{1}{2}$ miles of sand, with the 40 per cent; and we put down about 6 miles, yes, 10, with the 60 per cent sand. We found that the sand with the 60 per cent oil was very such superior to the gravel or the stone. I was wondering whether anyone else had had the same experience.

Mr Hodgman.— Where you use the sand, did you get a salvy condition after rain?

Mr. Allison.— No; we had a very smooth surface — the gravel seemed to pit up. We had to go over it several times, particularly on a hill.

Mr. Hodgman.— We have no good sand in Saratoga county, but very little, and we used on a short section of road a year ago last summer sand for a blotter, and after a heavy rain storm we got a salvy condition, but I imagine with a good sharp sand it is as good as gravel, probably better. But we have no good sand.

Mr. Rice.— Was that put onto gravel, or used as blotter?

Mr. Allison.— Used as a blotter. I think we only went over once during the season, that is where we used the sand, while with the gravel we would have to fill the holes. Little pieces would pick up.

Mr. Hodgman.— Don't you think the trouble was that you didn't get the road swept clean and there were dust patches?

Mr. Allison.— Well, I don't know.

Mr. Hodgman.— That has been my experience. It is important that the road should be swept very clean.

Mr. Allison — The 40 per cent. oil was better than the 60, you say. We have found is just the opposite. The 60 per cent. oil with the sand laid right through the year, where the 40 per cent. became dusty.

Mr. Buck.— On what character of roadbed, Mr. Allison?

Mr. Allison.— It was all waterbound macadam, almost all of it.

Mr. Buck.— Yes. Mr. Hodgman's statement related to oil on run-of-bank gravel. There might be a material difference.

Mr. Allison.— Oh, I see. I didn't understand. I am talking about a blotter for any road.

Mr. Rice.— We have with us a man who has handled probably more oil than any other county superintendent in the State, and I would like to call upon Mr. Nostrand, from Suffolk county.

OILED ROADS AND OILED GRAVEL ROADS

By PETER E. NOSTRAND.

I am going to read more or less of this subject, because I find when I get started I am likely to get switched off, and having made these notes I think it will be better to take it up in a consecutive way, which a man can do by reading, rather than talking offhand. If one talks offhand he misses a number of things, and I would like to give you a statement of some of our experiences in Suffolk county on the building of gravel roads and on the use of oil on dirt roads. The question of oiled and gravel roads has a relation to traffic somewhat as the question of cars have. Our gravel roads and our oiled roads you may liken to a Ford car, and you can liken the State roads to the better class of cars. At least, the ordinary dirt road is likened to horse-drawn vehicles; the gravel and oiled roads to the Ford cars — and there are many Ford cars, and they do well, and so do the gravel and oiled roads — and the higher class are the higher class cars.

I have the honor and pleasure of talking to you on the subject of oiled roads and oiled gravel roads, a subject which I believe to many of you is of considerable interest, and I am glad to pass

on to you for your use the results of our experience with oil and gravel roads in Suffolk county.

Last year I made a careful analysis of the make-up of the roads in Suffolk county. I found we had there 115 miles of gravel roads, of which about ninety miles are Peekskill gravel and the balance native gravel, all are oiled, and from our experience I can say that properly built gravel roads, properly maintained and oiled, will carry all excepting very heavy traffic in a satisfactory manner at all times of the year.

Peekskill Gravel Roads

Peekskill gravel has a natural binding material and the gravel is spread on the properly formed up road bed. Usually about 6 inches thick, evened off, and rolled. If built during the winter the road is oiled in the spring or early summer after the road has become well packed. Now in the matter of thickness of gravel roads, I hear some of the men here talking about 12-inch gravel roads, and we ordinarily have recommended to us by the authorities not less than 6 inches for a gravel road. Many of our towns cannot afford 6 or 12 inches of gravel in one place. Hauling is expensive, gravel costs something; and in some of our country roads on Long Island we have only 3 inches. I can say that a 3-inch gravel road properly maintained will carry almost all the traffic of an ordinary town excepting on its main roads. This 3 inches of gravel, if it is well oiled, gives good results for ordinary traffic. I don't think on my soil we need any 12 or even 6 inches of gravel, and I think we get a better result with about 4 than with 6 or 8 inches. If you put the gravel on sand you are going to have it shifting around. The proper thing to do is to mix the foundation materials so that you can hold the gravel where you put it and have it mixed up well with the foundation.

J. Y. McClintock, Monroe.— What is the base for these three-inch roads?

Mr. Nostrand.— They are on a mixture of clay and sand, which in our section we try to obtain on all our roads. If on a sandy section, we mix some loam with it and by harrows mix the

two together to make a good ordinary road surfacing. If we run across a section, as we do in some of our sections, where the former superintendents have been carting loam on the roads all the time — and in the spring those old roads were a foot deep with holes and ruts — we put sand on those sections. In some of our roads we have had to put anywhere from one to three or four loads of sand abreast to prevent the cutting down of the wheels into the material, and on those particular spots where it ruts up and gets bad in the spring, if you take care to put the material required, mostly sand, and start right with foundation, then the small amount of gravel coating answers very well.

Voice.— Is that included in your cost data?

Mr. Nostrand.— No; the cost data includes only the gravel and application of gravel.

The cost of Peekskill gravel roads varies mostly with the cost of material and length of haul from the cars. Huntington town last year built two sections each $1\frac{1}{2}$ miles long, 16 feet roadway, 6-inch of metal. On Nassau avenue the cost of the gravel was \$1,817 per mile; labor and teams, \$796; total cost per mile, \$2,613. On the Fort Hill road the cost of gravel was \$2,107 per mile; labor and teams, \$1,105; total cost per mile, \$3,212. This is an average of \$2,913 per mile, not including cost of oiling roads. Larger freight rates and longer hauls materially increase this cost in other towns. I have reports of an 18-foot road costing more than \$6,000 per mile.

Native gravel appears to me to be for my section, where obtainable, the best cheap material for good road construction, and when well maintained and oiled makes a good all-year-round road, though from the nature of the material and its lack of natural bond, native gravel is not as good or as permanent a material for road construction as Peekskill gravel.

We build native gravel roads usually 16 feet wide and with a thickness of gravel of from 3 inches to 6 inches. In some places a 3-inch coating of gravel well oiled gives good results for ordinary traffic, but more depth is usually necessary for best results.

The cost of native gravel roads is about as follows: Gravel in

wagons, 60 cents per cubic yard; hauling $1\frac{1}{2}$ miles and spreading, 65 cents; loam for binder and spreading, 70 cents; harrowing and rolling, \$15 per mile. This, reduced to a mile basis for several thicknesses, is about as follows, for $1\frac{1}{2}$ -mile haul:

For 3-inch gravel roads, \$1,125 per mile.

For 4-inch gravel roads, \$1,450 per mile.

For 5-inch gravel roads, \$1,775 per mile.

For 6-inch gravel roads, \$2,100 per mile.

If the haul is greater it increases, and if less it diminishes these amounts, and the total is also materially affected by the cost of the material.

In the town of Shelter Island this year we have built $\frac{1}{2}$ mile of 3-inch gravel road, 16 feet wide, for \$390, or at the rate of \$780 per mile. Short haul and cheap material.

It is hardly necessary, though proper, to call to your attention the fact that roads to be improved by a hard surfacing must be properly drained, formed to shape, and composed of a proper mixture of clay, or loam, and sand to hold up and mix with the gravel to a sufficient extent to hold same in place. If these conditions do not exist they should be provided before the surfacing is put in place, or good results cannot be expected.

Our native gravel (*i. e.*, Suffolk county gravel), being mostly gravel and sand, has to be held together in the road by an outside material, usually clay or loam, which should amount to 15 or 20 per cent. of the total mass, evenly spread over and mixed with the gravel. Gravel roads when constructed will not wear long unless protected from the action of the water and the stone held together. This can be best done by the application of oil, and we now get to oiled gravel roads.

As stated before, oiled gravel roads properly made up and maintained will give good results all the year round, and these results can be obtained by the following method:

One-third to $\frac{1}{2}$ gallon of 60 per cent. asphalt oil or tarvia per square yard should be evenly spread over the surface, preferably from a pressure spreader, the surface having been previously swept clean if necessary.

After the oil has been laid long enough to spread well, a coating of $\frac{1}{4}$ to $\frac{3}{8}$ inch of sand and small gravel should be applied as a blotter and wearing surface.

The road should be carefully watched so that no holes or openings appear. Any depressions or small openings or ruts, if they appear, should be filled with gravel and sand, already prepared and mixed with oil, or the openings filled with the mixed gravel and sand and oil applied again to the surface of the patch if deep and resanded, or the bottom of the patch only treated before applying the gravel and sand if the opening is shallow. Proper maintenance keeps the road even, the water from disintegrating it, and the frost and thaws from breaking it up. The three-inch native gravel oiled road on Shelter Island, notwithstanding the frequent freezings and thawing out of this road to date this winter, is to-day in fine shape for auto traffic. The cost of oil and the application and sanding is practically the same as for dirt roads and will be considered later.

While the ideal maintenance will keep roads in good shape, careless maintenance in time puts all roads in impassable condition, and this in time brings nearly all gravel roads to a stage that they must be resurfaced or in some way put in satisfactory shape again. This can be done cheaply and satisfactorily as was done in the village of Sag Harbor this year. The streets were of Peekskill gravel and through careless maintenance were so full of holes as to be nearly impassable. These roads were scarified or plowed up with a road roller and scarifier, the material well mixed by harrowing several times, re-crowned with the road machine and re-rolled into shape, then oiled and sanded. About $1\frac{1}{2}$ miles of road was rebuilt, some of it 50 feet wide, with only 10 days use of roller, and is now in fine condition, though through want of care again showing some depressions. Eternal vigilance is necessary to keep good gravel roads, as well as other things. I want to say that it is one of the troubles we have that when we strike villages we usually get something we don't like. That is the proposition on Long Island — I think the same as most everywhere — as soon as you strike the village you get something that is bad. These villages spend a lot of money in putting the roads there, but they don't take care of them; they don't maintain them.

If gravel roads are oiled too often or too heavily with oil and enough sand is not used on the surface, or if too much sand has

to be used because of excess of oil, when heated under the hot sun of summer the surface creeps and produces waves, which are uncomfortable, unnecessary and when once created hard to overcome. So I wish to caution against the use of too much oil on gravel or any other roads, as unnecessary, wasteful and of serious damage to the roads. It will probably surprise some of you gentlemen for me to state that a few days ago the supervisor of the town of Southold, in Suffolk county, said to me that Southold town did not want any State or county roads, that their oiled dirt roads were better and cost less. Why did he make that statement? Because many of our old State and county highways had been so worn out through lack of maintenance that they were hardly fit for travel. Fortunately the roads in Suffolk county are getting into shape where they are now travelable; the county and State highways are in good condition excepting a few miles, and very soon those will be, because contracts are out for their proper shaping up through the maintenance end.

I speak of this to show the condition in which oiled dirt roads can be put and kept, so that all the season athrough these dirt roads are in fine shape for automobile and other traffic, are not rutted or pitted, and are holding up fine.

Several other towns in the county, Southampton having the longest mileage, have their main dirt roads in such shape that winter weather conditions do not seriously affect them and the roads can be traveled any day in the year. In such good condition are these roads that when it came to marking up the roads on chart sent by Mr. Rice, I took the matter up with our District Supervisor and we concluded to show the main traveled oiled dirt roads as being of a permanent character.

In most of these roads this condition is due in part to the cumulative benefit of oiling these roads year after year, the asphalt becoming mixed in the roadbed to the depth of 6 or more inches by re-plowing and harrowing the whole road surface to that depth, gradually geeting in better condition for road work. After a few years if we keep this up we will get an asphalt road. Of course, asphalt disintegrates more or less, but when finely mixed up it renders surface material more impervious, renders it harder, and makes an elegant and good carrying surface.

How is this result accomplished and at what cost? I will endeavor to show you what we find is necessary to put and keep a dirt road in shape for continuous use. We find that for oil to stay on the ground over winter the roadbed must be of such a nature that it does not absorb water and retain it, or so light that it will not hold well together when dry. If the road is too heavy we mix in sand or sand with gravel, and if too light put in some loam; attend to drainage, and have the roads well shaped up and crowned, and oiling will pay properly applied and cared for. But do not forget to put your road in proper shape or your oil is wasted so far as fall or winter use is concerned. It is not wasted so far as the dust protection is concerned or summer use to a great extent, because conditions in the summer are different from fall or winter; but unless oil is put onto a properly prepared roadbed you are wasting it so far as use for fall and winter is concerned.

How much oil is necessary? This depends to some extent on the oil and the previous condition of the road, but also to a considerable extent on the cash on hand. Southold and most other towns get along with one application, in June or early July. Southampton this year made two applications, one in June and another in October and November.

As to the amount applied. Shelter Island applies less than $\frac{1}{4}$ gallon per square yard. Southampton applies $\frac{1}{2}$ gallon per square yard; Shelter Island applying less than 2,000 gallons per mile and Southampton from 4,000 to 5,000 gallons per mile of road, the roads being very wide. Some of the main roads have even more.

This oil is applied mostly from wagons holding about 600 gallons, spraying the oil under pressure. From some of the wagons the oil flows by gravity, but it is generally conceded that the pressure wagons give best results, the reason being that where the oil flows by gravity it drops in narrow spots along the road, whereas the pressure wagons spread that over so the places where the oil comes are spread together. In the one case we depend on the natural flow of the oil to cover the whole surface, and in the other we cover it on the start. So on Long Island we like the pressure wagons best, and the towns not having them are changing over to the pressure wagons.

In most cases two widths are applied, each of 7 or 8 feet or more. Sometimes three widths are applied, or even four on wide roads. The usual practice is to overlap a foot or so each time. This morning we had quite a discussion of the automobiles running in oil. It is not necessary, and it is certainly very objectionable to run an automobile or any other sort of vehicle in the oil. There is no necessity for running it in the oil. Do not apply the oil over more than one-half the road at one time. Wait until that side has been protected and then proceed with the other half. The oil is wanted on the road, not on the wheels of wagons and on tires of automobiles and spattered in all directions.

After the oil has been applied long enough to penetrate and flow over the surface, usually one to three hours, the oil should be coated with a cover or blotter of sand and fine gravel. This takes up the surplus oil and makes a wearing surface. The fine gravel helps to bind it to the ground surface, sort of nail it down. When one side has been sanded, traffic can be turned on this side; then the other side oiled and sanded in due time. I have gone along on some roads, in the town roads or village roads where they have oiled all the way across the street, and it was almost impossible to stop an automobile. It is certainly a dangerous proposition for an automobile, and an unnecessary proposition, when one side of the road can be done at one time, and when it is finished go ahead and fix up the other side.

When you have done all this, do not go away and think your road will stay in shape indefinitely, because the minute the road is finished and traffic commences to pass over it, disintegration and wear begins and if not controlled the road decays. This means maintenance. The roads should be traveled over every few days and any depressions, holes or ruts filled up with sand or gravel, a little oil being spread both under and over the new material put in as necessary, and under the traffic the poor spots heal up and cannot be distinguished from the balance of the road in a few days. If whole sections of the road go wrong, the place is fixed up by the addition of the right material, and re-oiled. During this last year I asked all of my town superintendents, where using oil (nearly all our towns) to make provision to hold over during the late summer and fall enough oil for the maintenance of the roads. Practically all

of the town superintendents have complied with that request; all of them kept more or less oil on hand and have all kept roads in fine shape during the whole season. The practice in our county before that time was to buy our oil in the spring, put it over the road, in some cases not even sanded, and let it go at that, and by the time fall and winter came there was practically no good roads left in many cases.

Often the first sanding will not be sufficient to take up all the oil when large quantities are applied, in which case the sanding is done again about a week or ten days after the first sanding, and occasionally this is done the third time if required. Some of our villages down there carry the oiling to an extreme. In Southampton they have about a mile and a half stretch of road called the Hill Road, and they have oiled that five times during the past year, sanding it every time they oiled it. The condition of that road is splendid. You would not know in traveling over it but what you were traveling over an sheet asphalt road. It is not breaking up, it is in fine shape; in fact, it is in better shape than some Peekskill gravel road of about a mile on the main street that has been treated the same way. That gravel road has lots of ruts and holes. They have not maintained it as good as the other, and the gravel road is not in as good shape as the plain oiled dirt road. That is carrying things to an extreme, but it is a rich town and they can well afford to do it.

The proper care of oiled roads prevents the forming of holes and ruts. Do not let holes form and grow.

After the oil has been down a few weeks, the surface sand sometimes wears off under traffic and is thrown to the side of the road. By the use of a road hone or drag this is thrown back and respread. Do not use any machine to cut in the surface of the oiled road, but in one way or another keep all depressions mended and filled, and your oiled road will stay by you in the same way you stand by it.

We find here that the crude oils, when obtainable, with about 40 to 60 per cent. of asphalt give the best results, the percentage of asphalt depending on the soil. The light soils of Southold do well with the 40 per cent. asphalt; the heavier soils of Southampton do better on the 60 per cent. grade. The crude oils contain the lighter oils, kerosene, gasoline and other oils, which penetrate into the soil

carrying the asphalt with them. The manufactured oils do not penetrate so well, nor do the oils heavier in asphalt, as they are inclined to cake on the surface and later in the season flake off under traffic. Light, sandy soils take well to the heavier grades of asphalt oil. You can understand that, that when these asphalts are mixed in with a lighter oil, those lighter oils are going to go below the surface and mix with the underneath material, and if you can fasten the top into the ground you are in better shape than you are if it is not fastened.

Last year the oil cost from four to five cents per gallon. This year prices will be higher.

The cost of application depends on the length of haul, the condition of the road and the character of the oil, usually from 1 to 2 cents per gallon, or say from \$25 to \$40 per mile.

The cost of sanding depends in the length of haul, whether placed on the road in small piles in advance of oiling or hauled and put on at one time. It usually runs from \$30 to \$60 per mile. We find one of the best ways of sanding is to have the sand placed in piles along the road, and when the oil is put on the laborers follow.

Voice.— Did you ever use a sanding wagon?

Mr. Nostrand.— I never have; no, sir. We don't think we want anything to go over the oiled roads. Sand wagons may be all right — but the cost of the sanding is not much.

When roads have been oiled a few times the surface gets into a sticky condition and the new oils do not penetrate well and the surface cannot be maintained in even shape. One of the difficulties we run up against, after you have oiled for a while you will find it won't stay. If you put sand on, it flakes up.

Breaking up and reploting the road is the remedy. The road is plowed with a road plow 4 inches to 8 inches deep, depending on the character of the roadbed. This is then thoroughly cut up with harrows and broken and mixed up as fine as possible; new material of proper quality to even up the mixture put on when necessary, then the road is reshaped and crowned and rolled into compact shape, and oiled and sanded as a new road. This even is carried to an extreme in some of my towns. Some think it is necessary to

replow and reshape and recoil the roads every year. I do not think that is necessary. The experience I have had is that the oiling of road, if properly maintained, it is useless to oil the road unless not properly taken care of — it runs sometimes three or four years before it is necessary to replow.

You will thus see that oiled dirt roads are ever increasing in value, as asphalt is becoming mixed more and more with the sub-surface material, which thus becomes compacted and more impervious to water and the action of frost and the weather.

In conclusion, where gravel is available, either Peekskill or native, by all means use it as much as possible, and always protect with an oiled wearing surface and maintain the surface in proper shape.

Oiled dirt roads are very desirable and with proper mixing of dirt materials properly oiled and sanded, with careful and unceasing care, can be kept in good working condition the year around regardless of weather conditions.

I thank you for your kind attention, and hope that these statements may bring out further information of value to all of us.

Mr. Hodgman.— Do I understand you use what you term crude oil.

Mr. Nostrand.— Yes. We find that in our use that crude asphalt is the best thing to use.

Mr. Hodgman.— Where do you get that?

Mr. Nostrand.— It is bought of almost all the oil men — if you specify it. If the kerosene and naphtha is taken out so nothing is left but the asphalt, and some other things are mixed in, as we sometimes get, we do not have anything but the heavy oil. That goes onto the surface and cakes over, and you sand it and it makes a cake half an inch thick, which rides all right during the summer time, often, but as soon as it gets cold it flakes right up and breaks and the ruts will appear, and you can't prevent it. You take the natural oils, if they are not too heavy, they will cut down into the soil, and, while it don't appear in the surface to be so flat and fine as some of the oils do, the wearing material is not just there in the quarter or three-eighths inch, but it is down

an inch and a half or so, and you don't get the effect of the thing wearing right off with the traffic upon it. It is a question of soils to a great extent which asphalt shall be put in.

Mr. Hodgman.— In oiling, do you use blotter?

Mr. Nostrand.— Always. If you don't use a blotter, the oil will run off, and I have seen it washed off. If we oil roads before sanding and a heavy rain comes, I have seen the whole side of the road covered with oil, the grass and everything alongside the street would be covered. That is not where we want the oil. The way to keep it in the roadbed is to put on a blotter, and make it of an absorbent nature. A clay blotter would not be of any use, but the sand, and small gravel, has a good many surfaces in comparison to its size. It holds the oil where it ought to be and the traffic packs it down. In that way you get a road. You would be surprised to see that three-inch gravel road on Shelter Island. The surface to-day is almost as flat as that table to travel on. Some of our dirt roads are good, but a lot there and everywhere else, have not been yet put into shape to hold simply as dirt roads, but this cumulative benefit of the asphalt on dirt roads I think is a thing we should all consider, that cumulative benefit and the condition those roads get in,— nice to ride on, not hard, good for horse traffic, and you can go over them any day in the year. And that is the reason the supervisor of the town of Southold said they did not want anything but an oiled dirt road, did not want state roads, because the others do the work in a more satisfactory way.

Mr. Hodgman.— The three-inch dirt roads you trench out?

Mr. Nostrand.— No, we simply form our road and spread it from the wagon. Our gravel is different from some of yours. Some of yours have a binding material, which we lack. We have to furnish that binding material. We spread our gravel on the ground and over it put three-quarters to an inch of loam, or clay, and we harrow it or roll it, or don't roll it — lots are rolled simply by the packing action of traffic. Those roads will keep for a while, but the binder is not good enough for our roads to hang and stay. We have got to put something more on to bind

the upper crust, so we use the oil. Without the oil our gravel roads would not amount to much, but we think our gravel roads are very good. And I am recommending to the towns in my county that they use gravel wherever they can, and in many of them there is a good opportunity.

Mr. Hodgman.— Have any of you had any experience in the oiling of cinder roads, or a combination of cinders and gravel, or combination of cinders and slag and gravel?

Mr. Buck.— That question will be taken up by Mr. Diehl later. Before he speaks, I want to say that in considering what we have just been listening to on the matter of oiling gravel roads, it should be borne in mind that the two speakers who have addressed you represent the opposite extremes of soil and climatic conditions in this State. There is probably no county in the State where the frost goes deeper and stays longer than in Superintendent Hodgman's county; no county in the State where they have so little of it as in Superintendent Nostrand's. I think that will cover in a great measure the difference in the depth of gravel that is recommended in the two cases. Now then, all of us from up-State can think of, this minute, miles and miles of road that next spring, if they had a coating of only three inches of gravel, would be very much in the same shape as a mudhole with a horse blanket laid across it, so far as supporting traffic is concerned. In Superintendent Nostrand's county they do not have those deep, penetrating frosts that leave the soil a mass of jelly.

Have any of you ever had a personal visit to those oiled dirt roads that Mr. Nostrand has been telling about? Well, I want to say that I was down there over a considerable mileage two years ago this past fall with Deputy Commissioner Wilson, and I was just thinking of what he said. You all know what kind of a road builder Walter Wilson was, and what his knowledge of road building materials was. After we had seen about five or six miles of the road between Riverhead and Greenport, one of the dirt roads, he turned to me and said: "If I had not been here and seen this with my own eyes, I would not have believed it." Now, I am frank to say that I haven't much of

an idea how far that process is applicable to our up-State soils, but as regards the gravel portion I have very definite ideas. I believe there are a lot of our up-State counties that have been overlooking some mighty good bets as to possibilities of per-improvements with materials at hand, that is, with their own gravel and an oiling process such as Mr. Hodgman and Mr. Nostrand have described. I believe there are many locations in many counties where it is the cheapest possible permanent improvement we know anything about to-day.

Mr. Nostrand.— I don't want the members to go away with the idea that I live in the South. He said we don't have any frosts, or not frosts so deep. Our frosts, may be don't go down six feet, but they often go down six inches to a foot, and our trouble is that that condition exists and the frosts comes out and it keeps going in and coming out, it don't go in and stay there; but every time it comes out if the roads were not protected we would travel in a foot of mud. In my own town, three years ago, it was impossible for me to get around at all with an automobile at this time of the year. To-day, I can go on any of the gravel roads in my town, whether three inches or more. But we do have these frosts; we don't live in the South. I don't say that three inches will be good for you, but I say, try it out and see whether four or six inches is good. Don't waste money by putting more material on the ground than is necessary.

Mr. Buck.— But here is one condition that you lose sight of. In Mr. Hodgman's county this frost will penetrate anywhere from two to five feet. When that begins going out it don't go out entirely from the bottom. It frequently happens that the most rapid thawing occurs from the top and underneath is an absolutely impervious strata that is yet frozen solid, and consequently the road lies in a basin of mud. You have a radical difference; that is, it begins thawing from the bottom.

Mr. Nostrand.— Not necessarily. The sun is what thaws our roads. Our soils will thaw out in the ordinary way, the mud makes the same as everywhere, and you go down in the mud until you strike the frozen ground; not once or twice, but all through

the winter. It is not the thawing once or twice; it is the continuous breaking of surface that we have to contend with. We don't have zero, but it goes down to about fifteen degrees; we have had continuous weather of about ten to fifteen degrees temperature and that will freeze the ground quite a depth. I know it freezes ice ten inches thick sometimes.

Mr. Buck.— You speak of the matter of plowing. I remember that first agreement I ever saw that provided for that. In one of the towns I happened to notice the item of a certain amount per mile for breaking roads. My idea of breaking roads was getting out with a pair of oxen or bobsled. I knew they didn't have oxen or sleighs, nor much snow, and I didn't know what they were trying to put over. So I wrote to County Superintendent Smith to find out what he meant, and he described it exactly as Mr. Nostrand has to-day.

Mr. Nostrand.— If anyone has roads of the character I speak of, that they intend breaking up or replowing, don't wait until too late. If you wait until too late, there is not enough water falls on the road to pack it sufficiently and that road during the whole season will be a little soft. If you do it at the proper season, when there is plenty of water coming to us, as there is in the early spring, if it is done in the early spring the ground hardens down and it makes an ideal traffic condition.

In Southampton there was a census of several roads showing over 100 automobiles per hour. There is a great deal of traffic on the south side of the island, especially auto traffic. Perhaps three or five thousand inhabitants in Southampton; the street at times is two deep with automobiles on the main street for a quarter mile or more.

Mr. Creiger.—What is the amount of money available per mile for roadwork in the county, and particularly the town Mr. Nostrand speaks of?

Mr. Nostrand.— I figure on the main roads at least \$200 a mile to expend. But even that does not count up on a basis with the macadam roads where it runs \$700 to \$800 per mile. That is the basis of the supervisor's statement that it is not only better

but cheaper. I believe we have roads we can build in our section that can be maintained at less price than the macadam or concrete roads for instance; but when you come to consider the macadam proposition, then the maintenance of our dirt roads on a basis of \$200 a mile is much cheaper, and the roads are practically as good.

Mr. Buck.— In your case, Mr. Hodgman, in which you had such signal success, could you have built the average town macadam roads for much less than double what the oiled roads have cost you?

Mr. Hodgman.— Oh, no; they would cost more than double.

Mr. Nostrand.— I think the figures I gave would indicate that. The more expensive were \$2,000 a mile at 6 inches, and that with an average haul of $1\frac{1}{2}$ miles. If that haul could be cut down to a mile or a half mile, it cuts the cost down.

Mr. Buck.— Mr. Diehl, will you tell us something about this subject as applied to Erie county, and also touch on your experience on oiling on slag and cinder roads?

Mr. Diehl.— The very well digested paper we have just heard indicates a very careful study on the part of the speaker and I think we ought to compliment Mr. Nostrand on taking the time to prepare this kind of a paper. I think it is an example we all could follow, and if we did follow it we would get more from these meetings than we do. In view of the fact that I did not know until this morning I was going to talk on oiled roads, it seems rather a parody on the subject that I should follow a paper such as this with offhand remarks.

We haven't got the mileage of gravel roads in Erie county that they have in Long Island, but we are rapidly building gravel roads and they are becoming a popular form of construction. And I might say a properly built gravel road is the most suitable for motor vehicle traffic; for what you might call the passenger cars there is no type of road more pleasant or more economical to drive over than these gravel roads.

Now I can't help but refer at this time to what I think a fundamental proposition on the road oil proposition. It strikes me

that there is a very close analogy between railroad and highway; they are both designed and built to carry travel. The first consideration is to move traffic. Whenever a railroad is repaired or maintained or reconstructed or widened or double-tracked, or bridges built, the first consideration is, how shall the traffic be cared for. The first consideration in building highways should be, how shall the traffic be cared for. We should get away from the attitude of "the public be damned," and provide for traffic.

Now Mr. Nostrand very well covered that in the subject of oiling, it is possible to do that in a way not to inconvenience or trouble the traveling public, and whether it costs more or less, that is the way it should be conducted.

The gravel roads we have built in Erie county have been built generally about eight or ten feet wide. We attempt to get a gravel out there that has a certain percentage of clay. That clay acts as a natural binder — not too much — better to get one that has too little and then add a little clay as binder material. Great care must be used. We put on a five-inch bottom course (this is a method adopted in one town — there are several methods), then on that gravel we spread a bituminous material, usually the No. 4, and we put nearly half a gallon per square yard. Then we put on top of that about two inches more of gravel, and that is very thoroughly rolled. There will be some parts of that road where the oil will come up thicker than in other places, and some places where the oil does not look uniform, and by raking you get an absolutely even distribution of the bituminous material. This is cold material. Then the road is well rolled and shaped, and it is surprising what a very smooth, durable road we obtain. The top course looks almost like a sheet asphalt road. That bituminous material seems to penetrate through the manipulation of the top two inches and we carefully blot out any wet places by raking, or, if necessary, adding sand or gravel where there is too much bituminous material.

There is one very important point in the application of the oil on all gravel roads in particular, and on all roads in general, and that is, a natural foe of asphalt is water. If you get asphalt in contact with water the asphalt will rot. This is borne out on asphalt roads in the cities; it rots toward the gutter and they

paint it for that purpose. Therefore it is even more important than in the ordinary gravel or waterbound road that the subsoil and subgrade be very carefully prepared and drained, because if there is water there it will work up, especially in times of frost. We get the real frost out there, and we have to carefully prepare the subgrade and bottom course.

Another type of oiling is a surface application. We do the surface application both on gravel and macadam roads by applying about one-third of a gallon per square yard and covering that with a cover either of sand or of stone or of slag. We try to avoid the stone cover because in our country the Niagara limestone contains much flint and in the stone screenings we get particles of flint which are three-cornered and penetrate automobile tires. We cover with sand or slag, and we get excellent results with slag screenings. It is very necessary to have the surface absolutely clean before the bituminous material is applied, because if it is not clean it will muss up and the particles of dirt will absorb the oil and make it blotchy.

That kind of wearing coat costs us about 7 cents a square yard. The bituminous material costs about 3 cents a square yard without manipulation, and the cover about 2 cents, and the manipulation the other 2 cents; about 7 cents a yard. The gravel roads average about 23 cents a square yard—that was the average last year in the town that did the work—and the bituminous material added about 3 cents, making the total cost 26 cents a square yard. We build 8 or 10 feet wide, so it would cost us about \$1,300 per mile.

We do much of the work through private individuals oiling the natural soil roads, and we usually oil with that No. 4 oil, although on the surface application we usually use No. 6; but we use No. 4 on the natural soil, and it is usually done by individuals; but the town superintendent of highways shapes the road and gets it in good shape before anything is applied, and sweeps off the finer material.

Along the lake shore, where the soil is largely sand, we apply that half to a third gallon per yard and use the fine stuff swept off for the cover, and I agree with Mr. Nostrand that we should never use any bituminous material without covering. The

easiest way to get it, the vendors of the bituminous material will apply the oil for $6\frac{1}{2}$ cents a square yard in place in Erie county, a third or a half gallon to the yard as the case may be. They sell the same material they apply for $6\frac{1}{2}$ cents — they ask 8, if you apply it, in barrels. Of course in the town work we endeavor to buy — where the town has the equipment — all the bituminous material in carloads, because that is the cheapest way. We have not done enough work to really give you the experience about applying hot or cold, but on the No. 6 we have applied a great deal of it hot and have gotten some very good results.

Regarding the slag roads, we have found on the slag roads that glutrin seems to operate better than the bituminous material. The theory on which this glutrin works is that it has not a direct cementing property like bituminous, but acts by disintegrating or breaking down the material, and as it breaks down it mixes together by chemical action. It won't break stone very well, because it is too rigid and compact in texture. It will break down gravel better than stone, and slag still better. We have some samples of slag broken down that you can hardly get through with a pickaxe, four or five-inch crust.

Mr. Buck.— We will now turn over the meeting to the county superintendents, in order that they may continue the business begun last summer and perfect their organization.

(Balance of meeting devoted to organization matters.)

Morning Session, January 26, 10 a. m.

The first part of the meeting was devoted to organization business matters, Mr. Loughran presiding.

Mr. Rice.— I think the Commissioner only has a few minutes and I am sorry to break in on you at this time, but I am sure you will all be pleased to hear from Commissioner Duffey.

Commissioner Duffey.— I have more than a few minutes if it is necessary, because I consider this gathering a very important

thing and I will spend whatever time is necessary. We have had two very full days up stairs and it is hard to get down here, but, while I do not want to make any invidious comparisons, I regard this as more important even than what we have had on up stairs, delegations from various parts of the state, etc.— you can imagine what they were after — and I will be very glad to confer with you as long as you desire. I have nothing particular in mind to say, not a single thing. I feel more like saying to you, representing all that you do, what do you want me to discuss or say? I feel more like having a conference with you than making a speech; like saying to you, have you any questions to ask or is there anything you would care to talk over with the Department?

Mr. Creiger.— The County Superintendents' Conference was engaged in discussing in a way the maintenance of State and county highways. I think it would be very interesting to have you discuss that question and enlighten us as to the views of the Department in relation to the maintenance of the State and county highways; perhaps following the plan that has been suggested of placing the work more upon the county superintendents and perhaps eliminating the maintenance department.

Mr. Duffey.— Well, that is a little question! (Laughter.) That has been discussed more or less very recently, I take it. It goes without saying that anything along that line is a very big question. Have you been discussing it here?

Mr. Rice.— They were discussing it here.

Voice.— Why not read the resolution we were discussing?

Mr. Ball.— “Resolved, That the New York State Association of County Superintendents emphatically endorses the principle of local control of the maintenance of State and county highways under the immediate control of the county superintendents and subject to the general supervision, rules and regulations of the State Highway Department.”

Mr. Duffey.— Let me say this, first, that it is a brand new thing to me, and when I say to me, I think that may include as well our Department here at the home office. I never heard

of it until yesterday morning, and then just the briefest sort of an outline was given to me; and for me to say or for this department to say what its attitude is on a thing of such importance and such magnitude as that would be a very silly thing on my part. In the first place, may I say that I have not studied that question, and may I also say in behalf of the Department itself, speaking of our force, the deputies and myself, that we have not either together or separately studied that question. I don't know what to say. Here you are, county superintendents of this State, in an informal way at least organized — I don't know but what you have a complete organization; that is not material — you are a body of men representing the fifty-seven counties, and you occupy as a body in the Highway Department of the State a peculiar position; you are partly State officers and you are partly county officers, and perhaps in the main we will say you are county officers, measured by the fact that you are compensated by the county and not by the State. I take it that is a resolution that has been introduced in your meeting — surely you are at liberty and have a perfect right to express yourselves in any way you see fit. I only say this — it is a word of caution, first repeating that we do not know what we think — that I do not think we ought to ever say what we think until we have thought a very long time. I suggest that you take the same position. Such a thing as this, involving millions of dollars, huge work, very important work, and work that will continue indefinitely in the future, such work as that, any plan, rather, as to such work as that should be one considered long and seriously by so important and representative a body of men as you. You are not just individuals sitting here. Each man here represents a county of the largest State in the United States, and, all put together, you represent the largest commonwealth we have. You as individuals, some of you, may have thought upon this subject long and well and have more or less fixed views of your own. It is very proper for you to discuss it; but I do say by way of caution, with reference now to the resolution which you have in your hand, do not let it appear that so big a thing was hastily considered. Your views will be sought for if this thing is pursued, and it no doubt will be. Our views in the Department no doubt will be asked

for if the thing is pursued, but I think, if I may put it in a sentence, the last thing that we want and the last thing you want, and the worst thing that could happen would be to have such a thing as that decided or materially influenced from a mass meeting standpoint. Such things should not be decided in mass meetings. There are too many features to it; it is too big a subject. It is the kind of thing that in a big body — may I make a comparison: We had a Constitutional Convention last summer, consisting of perhaps 150 men, the most representative that the State of New York could select for that purpose, and they sat here for some six months. The big serious problems that were before that body were not considered by the body at large, but they divided up into committees, and committees sat daily, hours every day, for months, studying, gathering statistics, obtaining views of those informed, discussing it back and forth. On highway matters we were summoned over there I think a score of times before the appropriate committees; discussions lasting sometimes a whole afternoon took place; working away at the details, looking for all the difficulties, searching out all the problems that were involved in those things. And no doubt that very important body did all its work on all subjects in the same way.

This thing — by no means am I now attempting to suggest to you what you as a body of county superintendents should or should not do in regard to a resolution; I should deem it impertinent on my part were I to try in the slightest way to either influence or guide you, but I know that you are perfectly willing that I should utter a word of caution and I think, on the other hand, if you knew that we as a highway department here, half a dozen of us as officials with considerable responsibilities placed upon our shoulders, were about to hastily pronounce our views, I am sure you would say or would want to say: "Hold on now; go a little slow; you are talking about a pretty big thing that cannot be decided in a minute." Now that is true of this proposition. I have no views, and I should have no views, on this particular question at this particular time. I would not undertake myself to express a conclusion upon that big subject short of six months' study. I am told some of you know far more about it than I do. I am told that the present highway law, the main features of it, was drafted several years ago

by a committee that worked upon it for a year, and the chairman of that committee — I think it was the chairman, I may not be just right in some of my details but I think the general idea is right — I think the chairman of that committee as a result of his long and intelligent study, the legislature and the State governor recognizing the familiarity which the chairman of that committee had with all of the problems involved and looking with a good deal of approbation at the amount of work and the very complete proposed highway law presented to the legislature, as a result of all that work the chairman of that committee became the head of the highway commission of this State, because the governor thought he was a man very well informed, as the result of either having been on the committee or been chairman of it. In other words, our original codified law on highways was a thing that was studied out at length and with great care. Now here seems to be a proposition, very important and with a great many features to it one way and another.

We have said, you know, all of us, from time to time for many days past, that the great problem confronting us in the future in regard to highways, was how to maintain them, because we would some day, and at no distant day, have our construction work done and the problem would be maintenance, a problem which is affected by the increasing use of highways, and some of the uses of highways very injurious to them. They say the maintenance of the highway is the great problem. Now it must be done in the best way possible and for the least possible money. Now the question is, how? I don't know, and may I say to you that I doubt if you know how. I mean, in a sense where you feel absolutely sure on the subject; that you feel that the subject has been deeply and exhaustively studied and that the conclusions you have reached are hardly open to criticism. Now until you have reached — or any other body of men charged with responsibility of doing it — whichever way it may be — until they have reached conclusions as the result of deep and lasting study, they should not too fully commit themselves.

Now that is just going around in a circle and saying, in a sense, nothing. I again repeat, that I don't want to say what I think, as commissioner of highways, ought to be done until it has been studied with the very greatest care. I could stand here and argue

features of the problem, both sides, that would have some merit on individual argument; but it is so far reaching, so extensive, the question of cost, the question of taxation, who should bear the cost, how the organization should be controlled, having in mind that constant work should be done, having in mind what happened in Cattaraugus should to a certain extent, so far as principle at least is concerned, should be happening in Suffolk or Clinton, having in mind a State the farthestmost parts of which are some 500 miles apart, and the work should be done in a way that material should be procured at the lowest possible cost; that the highways that are being used by all the people of the State should be cared for in a way that was consistent, and one county say as good as another and in the same condition. You know nowadays, with the means of transportation we have, county boundaries are to a large extent gone as far as travel is concerned. The Erie county man is in the Hudson river district, and the Long Island man is in the Adirondacks, going not only for pleasure but often on business. We certainly do want the highways of this State maintained under some very simple, far-reaching system, a system that will by its results give satisfaction to all the people of all the State. There it is. I submit to you that a change — I do not say there should not be a chance; I again refrain from expressing myself on that; far from saying that we are maintaining the highways in this State in this year 1916, or are about to maintain them in 1916, in the best possible way and for the lowest possible cost; far from saying that. I will say that the department in charge of the maintenance of our highways during the past year has been at work, I may say night and day, trying very hard with the moneys available, and they were considerable in extent you know, to bring the highways of this State up to a good condition of repair. I flatter myself that real progress was made and good work done. On the other hand, it goes without saying that many a thing could have been done differently and better and many a dollar could have been saved. The State is large, but remember that, large as it is, proper organization helps big things as well as little things.

That is all I have to say. I think I would be rash to express an opinion or even an inclination of my views on this very, very big subject. But I will be glad to answer some specific questions.

Suppose this subject were presented to us, to the highway department with its officials on the one hand and 57 county superintendents representing the counties on the other, I would say, let's go into a session for the next three months, appoint committees, study and discuss it daily, see every point, figure every favorable and unfavorable feature. That is the way I feel about it.

Mr. Diehl.— You said you would be glad to answer any questions about it, and, while I thoroughly believe in your advice, I just want to ask whether you do not think that the advice of the county superintendents of the State would be of value — that is, advice after careful consideration — to the legislature of the State enacting new legislation.

Mr. Duffey.— Always. And may I say this (not as an impertinence) — not as the result of mass meeting action. You understand what I mean. The poorest place in the world is to fill a hall and have a few speakers and have somebody introduce a resolution. No criticism whatever, but I mean that is a way.

Mr. Diehl.— I thoroughly agree. But the legislature is going to take some action at this session in all probability. If we deliberate for six months and then express an opinion, it would be too late to be of any value. Now assuming that we would adjourn for a period of one month and think over this question, and then come back here and express a view to the legislature, do you or do you not think that view would be of any value whatever to the legislature.

And one other question. Do you believe the average county superintendent after his service — and nearly all of them have been in office for a considerable number of years — do you believe that with that experience back of them that they are capable at this time or within a month of this time of expressing a view whether or not the system that is suggested is better or worse than the present system?

Mr. Duffey.— After they had studied their opinion would be very valuable — but who knows anything about it? I mean, when you use the words "system suggested."

Mr. Diehl.— This resolution is not urging a bill; the resolution was that we believe that a system of maintenance under the control

of the county superintendents, pursuant to the general supervision of the State Highway Commissioner, would be preferable to the present system. We are not indorsing the Argetsinger bill or anybody's bill. We are not saying that this particular detail or that particular detail should be worked out. We are not even saying how the money shall be expended. It is this proposition, that many of us feel after working for years in the highway work, we are competent to say whether or not we think that a system of maintenance would be preferable to the system we have had the last few years. I agree with you; if an adjournment for one month is deemed desirable for careful consideration, I would be agreeable; but I think we ought to give any advice to the legislature, and not deliberate as you suggested for six months.

Mr. Duffey.— I did not have the legislature in mind — I named that time because I wanted to emphasize my subject.

Well, answering your questions. Do I believe it might be better under the county superintendents than under the present system? Of course, we know what the present system is; as far as the law on the subject, it is rather simple, it is not extensive. You have seen it at work. I have no doubt that all of you have in mind where it may be improved, especially in your own locality, and you also no doubt have clearly in mind if we were to continue, we will say, under what you call the present system, how with proper officials and due regard to efficiency and economy — I don't like the words, but they seem to be in frequent use nowadays — how even the present system with greater experience on the part of individuals who execute the work, better experience not only of department heads, but of the great army of men in whose charge the detail of the work is — you no doubt have in mind how very much better as time goes on the present system could be made. Of course that is so. We know that it is so. We have been working here, many a night and many a day, in the last several weeks, on the question of next year's maintenance, with the deputy in charge guided by one principle, and he has been on tip-toe in regard to that, and that was, how can we do this thing any better in 1916 than we did in 1915; in that connection planning what instructions be given, what details to lay down for following, and how to work in harmony with the local situation so as to get the best re-

sults possible. That is what Mr. Sarr, for instance, is sitting up nights for this winter — it is true that he is so doing, I may say.

When you go to the other question, I may say this, while on the one hand we do know what the present system is and probably see many a defect and shortcoming in it, when you suggest the other system, unless that were completely defined —

Mr. Diehl.— I asked if you thought the county superintendents were capable of expressing an opinion on that subject and whether that opinion would be valuable in view of the fact they have had office so many years.

Mr. Duffey.— Didn't you ask whether the maintenance under the county superintendent would be better than the present system?

Mr. Diehl.— No, sir; I asked whether you thought our opinion would be of value.

Mr. Duffey.— Of course, it would.

Mr. Diehl.— I only ask that because if our opinion is of value we ought to express our opinion, and let them use it for what it is worth; or if our opinion after a month's deliberation and meeting again will be of value, we ought to express it. I did not ask you, and do not expect you would determine, because you said you had not given the subject enough study; but simply, if our opinion is of value, why should not we give it to the legislature.

Mr. Duffey.— Very true. And of course your opinion is of value — or else 57 counties have made a lot of mistakes.

Mr. Diehl.— Then why should not we give it to the legislature?

Mr. Duffey.— Now I want to be judicial about this. I don't want to, for instance, take a hasty view on a question I don't know anything about. It is a truism to say that your opinion would be of value; of course it would. But an opinion, for instance, on what?

Mr. Diehl.— If you want to make it more general, is our opinion on the general features of the Highway Law of value to the legislature?

Mr. Duffey.— Oh, yes.

Mr. Diehl.— Then why should not we give it to them?

Mr. Duffey.—Anything that you have studied, are informed upon and give a deliberate opinion as the result thereof, is of the greatest value; I hope it is, and I will say that as long as I am commissioner I always shall want it from you. I only just suggest that if you are going to pass a resolution, be very sure that it is upon a well-defined subject and that it is your deliberate opinion as contrasted, as I put it a while ago, with what might be called the mass meeting idea.

Now I think you said something, Mr. Diehl, about maintenance under the county superintendent. Now it all depends upon what kind of a plan, with many a detail involved, is worked out. I think the law would have to be changed materially. You gentlemen here at the present time, as I said a while ago, you are state officials and you are county officials. It would want to be a law, uniform of execution; it would want to be such a law, too, that there would be freedom from any misunderstanding or strife; you would not want it so it was a case of blowing hot and blowing cold; you would not want it so there was a nominal control, we will say, in the state department, which might be disregarded with safety by any particular county if it so felt. It must be a big, strong, harmonious, powerful, working body, because it will have in two or three years some six or seven or eight millions of dollars to expend annually, and within six months, and that means a very big thing.

I tell you, if I were the one that were going to study the problem I would want to go with lots of good help and retire and deliberate for many weeks, with all the problems before me, and calling in those who knew much more than I did, to make sure that we did not go wrong instead of going better in making a plan. I have no doubt that the Legislature, if it has in mind a radical change in the Highway Law, will give the matter very careful study. I know enough about the members of the present Legislature to have the conviction or the feeling that it is composed of an unusually high class of men, and the committees that this Department has come in contact with this winter and last year impressed me very much as men very, very sincere and

diligent about their work; and I have no doubt if they have such a thing as that in mind that they won't put forth anything until they are convinced that it is right; but it will take them a long while to reach such a conclusion because they will see the magnitude of the subject.

I want to say in behalf of this Department (I will retire in a moment and let you continue your deliberations), I have come to feel that a body of men like you is of the greatest value, and and from time to time you come here — too few of you do come here and I wish you came oftener — I have taken up the problems of road building and sometimes of repair in counties where I have wished very much that I had the county superintendent with me to advise me in regard to his county. You may well understand what I mean when I say from time to time, while the requests are perfectly reasonable from a local standpoint, sometimes they smack of selfishness, and the problem I have here in regard to a county is, is this the thing that is of the most value to the county? And no man could assist me so much as the county superintendent, and I wish you would come oftener and let me know your views whenever you desire to communicate them. And the department wishes to co-operate with you in every way reasonable, and to get the benefit of your experience and advice.

I have had county superintendents sometimes say they hardly knew just what their function was, because they were half State and half county officials. That becomes unimportant if the county official is seriously devoted to his work and the State Department of Highways is in the same state of mind. Any little question as to just what function each has to be performed can soon be laid aside by reasonable men who are seeking to attain the same object. And I bespeak your assistance as long as I happen to be here.

And there are many things in regard to your counties that your advice and assistance is of the greatest value. I would like to have you understand what we are trying to do in the counties. May I say just a word. I am trying to get every county in this State where it may know for the asking — and perhaps we will give the information even if they don't ask it — how much money

they are entitled to have and spend in their county as a result of the appropriations by the Legislature. We have nearly gotten on that basis now, although there was an unbalanced condition; some of the counties had almost nothing and others a great deal. For instance, I expect to ask the Legislature to appropriate five million dollars soon, available at once, for roadmaking in the State, and another five million available September or October. The reason we divide it is because of the bad season the last year we have carried over an enormous mileage, and the same the year before, and we were, so to speak, crowded in our work in the highway department. There is no use trying to get the money faster than we can perform the work. That is the general plan. The other feature: Take a county entitled to State and county highways, out of the second fifty million, of a million dollars, both put together; if the Legislature appropriates ten million this year, that is one-fifth of the total amount, and that county is entitled to 20 per cent. of the million within the year 1916 within its borders. I want all counties to know how much they are entitled to and then they can thump and pound away all that they wish to. I take the position they are entitled to that amount, and it is a mere matter of deciding the roads to be built and an engineering problem in preparing them; those are the two things to be considered.

I want the counties to have that information the year the appropriation is made and I want you to tell them that that is what you will know; you are in consultation with your boards of supervisors.

Then may I say to you also, there is one thing I think every county should have very clearly and keenly in mind now. One-half of the second fifty million has been appropriated and perhaps ten million more will be this year, making thirty-five million in all. Every county can sit down and see what it is entitled to for State and county roads, can see just the problem, can divide the remaining unexpended moneys by eleven or twelve or thirteen thousand dollars a mile and get approximately the amount of roads the unexpended portion of the second fifty million will build in their counties. I am trying to do it with county after county. And I have found that in the counties where I have

had these problems up, where I thought there was an unbalanced situation, I have found the officers of those counties most fair and judicial when the matter was squarely presented to them. It may make a little bit of trouble to look ahead, because there is keenness to get roads; but this is a good time to see how much, all told you are going to get. And then please say to the county officials and work upon them as I am trying to do — only you have better opportunity — namely, build your remaining roads where they are most needed in your county and where they will serve the greatest number of people; and don't build unimportant roads, knowing that when you get through you will have very important roads unimproved in your county. In other words, take the matter up and help the county to plan so that that money will go where most needed and give the most material good in that county.

Business session resumed, including among other items the following:

Mr. Diehl.—I would like to make a motion. We feel the advice of the Commissioner of Highways is good and I am sure we agree with him when he says our opinion would be of value. I am certain these matters that are coming before the Legislature are matters which are of the utmost moment and which will affect the counties to a greater degree than before. I think our coming to Albany an extra time would be absolutely justified for the purpose of protecting the interests of our various counties and I think we can harmonize our views with the advice of the commissioner if we can meet here in one month and vote on those questions, then after deliberating on them for a month and after going back to our supervisors and our people at home and taking up the matter generally, and in the next month I am inclined to think the situation will start clarifying itself in the Legislature, the issues more sharply drawn, and the sentiment from the Greater New York of putting all the burdens on the county will be more sharply focused, and we can best ascertain what is for the best interests of the counties. I make a motion that the

matter be determined at an adjourned meeting of the general association to be called by the president within one month in the city of Albany.

(After considerable further discussion it was voted that a meeting be called by the president to further consider the question of maintenance, perhaps during the school of roads in Ithaca beginning February 21st, or soon thereafter.)

The following resolution was offered by Mr. Dayton, chairman of the committee on resolutions, and was adopted by a rising vote:

“Whereas, in the providence of God death has again taken one of the number of county highway superintendents and we are called upon to mourn the loss of John H. Youndt, Highway Superintendent of Seneca County; therefore, be it

Resolved, That this body of county highway superintendents would express their sorrow and regret at the taking from among us of an earnest, faithful member of our body, one who by his quiet, sympathetic manner had endeared himself to us all, and desire to place upon record our sense of loss and our tribute to the memory of John H. Youndt, by a silent standing vote and the spreading of this resolution upon the minutes of our meeting.

The question of semi-annual meeting was referred to the committee on program.

Mr. Rice.—Arrangements have been made for us to meet the Governor at twelve o'clock, and we will have just about time to get over there if we assemble promptly after adjournment.

Meeting adjourned.



STATE OF NEW YORK
DEPARTMENT OF HIGHWAYS

PROCEEDINGS

OF THE

FIFTEENTH SEMI-ANNUAL CONFERENCE

OF THE

STATE COMMISSION

AND

County Superintendents of Highways of
the State of New York

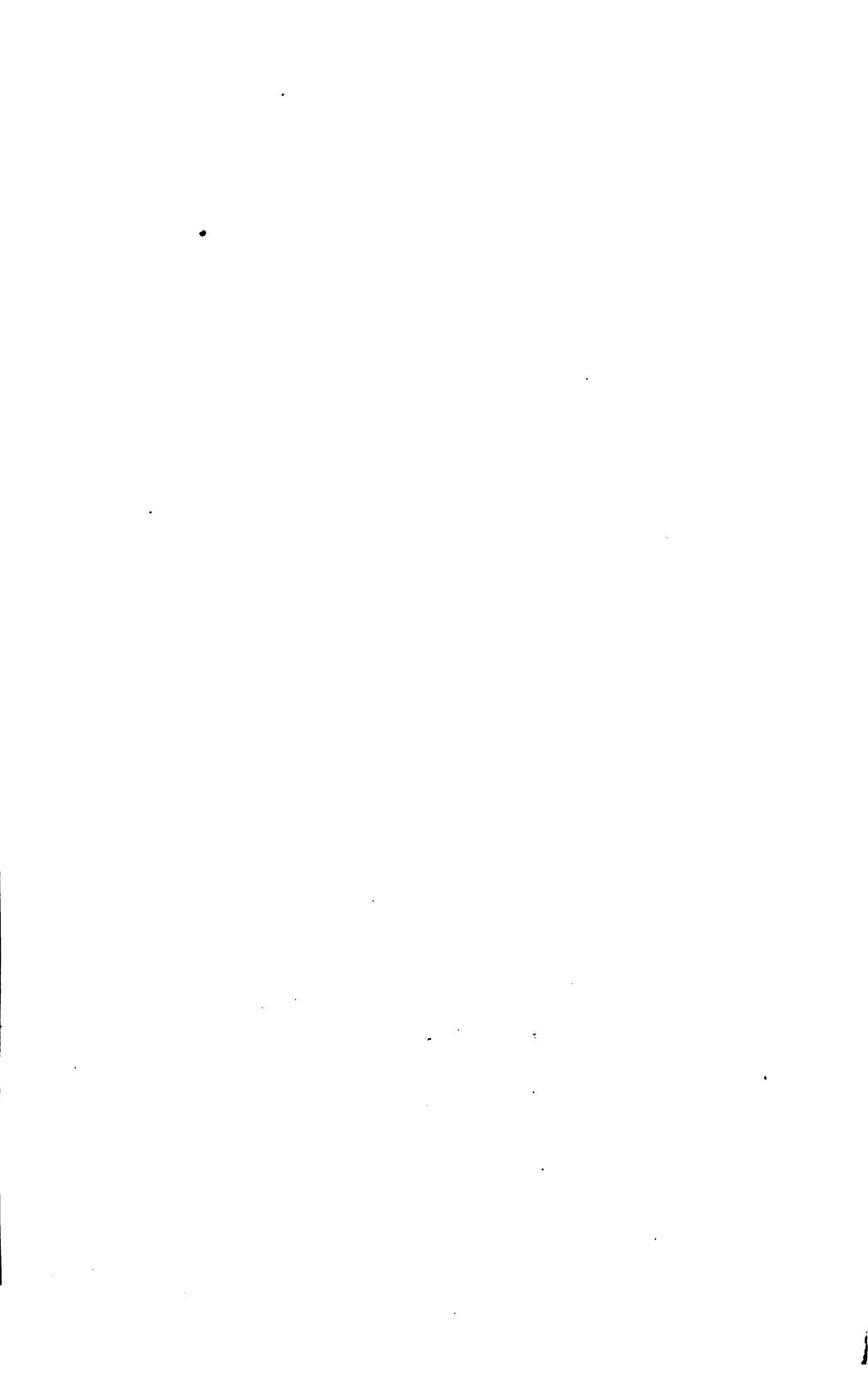
UNDER THE AUSPICES OF THE

STATE DEPARTMENT OF HIGHWAYS

AT GLENS FALLS, JUNE 28-29-30, 1916



ALBANY
J. B. LYON COMPANY, PRINTERS
1916



STATE OF NEW YORK

COMMISSION OF HIGHWAYS

LIST OF COUNTY SUPERINTENDENTS OF HIGHWAYS

COUNTY.	NAME AND ADDRESS.
Albany	E. J. Bedell, Delmar.
Allegany	Harry Craig, Canaseraga.
Broome	Charles Van Amberg, Binghamton.
Cattaraugus	Alexander Bird, Ellicottville.
Chautauqua	J. C. Dayton, Auburn.
Chemung	W. J. Knauer, Jamestown.
Cayuga	Willis H. Hollenbeck, Erin.
Chenango	Charles M. Stone, Oxford.
Clinton	Richard T. Mace, Keeseville.
Columbia	Lester J. Bashford, Hollowville.
Cortland	Dwight B. Coleman, Cortland.
Delaware	A. L. Van Tassle, Treadwell.
Dutchess	A. C. Rapelje, Poughkeepsie.
Erie	George C. Diehl, Buffalo.
Essex	Clinton H. Simonds, Elizabethtown.
Franklin	S. A. Howard, Malone.
Fulton	J. A. Karg, Johnstown.
Genesee	W. M. Torrance, Batavia.
Greene	Michael O'Hara, Tannersville.
Hamilton	Edgar Call, Lake Pleasant.
Herkimer	Will H. Corey, Herkimer.
Jefferson	Henry S. Ball, Watertown.
Lewis	Clarence E. Putnam, Croghan.
Livingston	George E. Schaefer, Geneseo.
Madison	George S. Tibbits, Oneida.
Monroe	J. Y. McClintock, Rochester.
Montgomery	Irving Lathers, Fonda.
Nassau	W. Fred Starks, Glen Cove.
Niagara	Thomas M. Bredden, Niagara Falls.
Oneida	Arthur O'Brien, Utica.
Onondaga	Frank E. Bogardus, Syracuse.
Ontario	George W. Powell, Canandaigua.
Orange	C. H. Smith, Middletown.
Orleans	Harry D. Waldo, Albion.
Oswego	Elbert A. Howard, Oswego.
Otsego	Samuel R. Lewis, Otego.
Putnam	Richard Michell, Brewster.
Rensselaer	Charles A. Roemer, Court House, Troy.
Rockland	Calvin J. Allison, Stony Point.
St. Lawrence	Joseph M. Howard, Ogdensburg.
Saratoga	John E. Hodgman, Saratoga.
Schenectady	Harry W. Cregier, Schenectady.
Schoharie	Van E. Lawyer, Cobleskill.
Schuyler	James P. Frost, Watkins.
Seneca	Fred A. Potter, Ovid.
Steuben	Charles E. Bower, Corning.
Suffolk	Peter E. Nostrand, Shelter Island Heights.
Sullivan	Monroe H. Wright, Livingston Manor.
Tioga	William O. Lay, Owego.
Tompkins	Arthur S. Cole, Ithaca.
Ulster	James F. Loughran, Kingston.
Warren	Bertram E. Murray, Warrensburg.
Washington	O. C. Richards, Hudson Falls.
Wayne	W. G. Sisson, Lyons.
Westchester	Chas. MacDonald, Realty Bldg., White Plains.
Wyoming	Robert Holmes, Jr., Castile.
Yates	Matthew McEvoy, Penn Yan.

PROCEEDINGS OF THE FIFTEENTH SEMI-ANNUAL CONFERENCE OF THE STATE HIGHWAY COMMISSION AND COUNTY SUPERINTENDENTS OF HIGHWAYS OF NEW YORK.

Meeting called to order by County Superintendent Bertram E. Murray, in the City Hall at Glens Falls, June 29, 1916, at 9:15 A. M.

Mr. Murray.— I was asked by the president of our association, Mr. Loughran if I would introduce some of the speakers, and I told him that I would try it. Now I am very glad to see you all up here. Of course, as you understand, this is my country. I have not any apologies to make for it, because I am proud of it, and we are going to try and entertain you. Of course, there may be some things that come up that could be done better, but we are going to try to do the best we can and I hope that everyone will have a good time. The board of supervisors of this county I expect will be with us on the trips. As we have enjoyed the hospitality of nearly every county in the state, we are going to try to return it, and I only can say that I hope you people will have as good a time here as we have had in your counties.

The Mayor is obliged to be absent. He had an important meeting — as you know, there is a large amount of work connected with his being mayor. I have the pleasure of introducing to you Mr. Beckwith, probably — well, they claim he is the brightest judge in the state, and also the youngest, and probably in the United States.

Mr. Beckwith.— I feel somewhat embarrassed after the remarks made by your presiding officer, and hardly meet that statement — but I think after I have finished a few remarks you will be able to decide the question yourself.

We take great pride in the city of Glens Falls, situated as it is in the foothills of the Adirondacks and near the historic Lake George, which you will have the pleasure of visiting this morn-

ing. In your visit there I might say that I would urge you to use due regard in order that when you are near the docks you do not fall overboard, that you may not be in the same predicament as a young lad concerning whom his mother wrote the following excuse because he was absent from school; she said: "Dear Teacher: Johnny can't come this morning; he got wet in the A. M. and cold in the P. M. — Mrs G."

We feel proud that you have chosen this city for your convention, this city which we are pleased to call the Parlor City of the North. It is free from all odors such as described by some of the soldiers in the trenches of the European war. It seems that one day the soldiers had some discussion as to which would cause the greatest effect upon the sense of smell, the odor derived from a goat, or that from a Turk. It was finally decided to submit the question to a committee appointed for that purpose, and they brought before that committee the goat, the odor from which so overcame the committee that they fainted. Then they had brought before the committee the Turk, and the goat fainted away!

When Mayor Lee and the other city officials were advised that you intended to come here and hold your convention, the police department began an investigation to ascertain the exact nature of this association, and as a result of their investigation they find that this is an honorable body. I might say that this investigation pertained to each and every member of the association with the exception of Brother Murray, the superintendent of highways of Warren county, who is still being investigated. This association, I say, is an honorable body, honorable men associated together for an honorable purpose, men charged with responsibility pertaining to the welfare of the traveling public. Therefore, as the personal representative of Mayor Lee and as City Judge of Glens Falls — not having all of the qualifications stated by Brother Murray — it is my pleasure to welcome you to this city and to impose upon you the sentence of the court, which is that you be given the entire freedom of the city — go where you will, when you will, and how you will, at all times in this community; and that the public extend to you their sincere, hearty and earnest welcome.

We congratulate you upon your association and we congratulate ourselves upon the fact that you are here. We welcome each and every one of you.

Mr. Murray.— We appreciate the Judge's remarks, especially in regard to the door keys. I think myself that this is a pretty good plan. I am pretty well acquainted around the county and I don't know as I will need the key — but some of the strangers might.

We have with us Commissioner Duffey, and I believe that we are mighty fortunate in having him. He is probably as you know if you have tried to have any business with the Highway Commission — well, it is a busy place and he is a busy man, but we have him here this morning to say a few words. I understand that the Commissioner has had to break a number of dates but so long as he has done it, he would like to get back as soon as possible and keep those he has not broken.

I take pleasure in presenting Mr. Duffey, the State Commissioner of Highways.

Commissioner Duffey.— I don't know as I like to be reminded about broken engagements and promises. I break a good many, and then I am accused of breaking a good many more that I do not know of, and so when the subject is brought to my attention, even under pleasant circumstances like this, I look upon it with some doubt.

While the Judge was speaking about the freedom of the city I thought of my boyhood, when I used to read about people being extended the freedom of the city, and I think one of the greatest ambitions I had was to live to see the time when some city might extend its freedom to me. This is the first time it has ever happened, and the unfortunate thing is that I am unable to accept it, as you may. I might say that if you do the things that I used to think I would do if I ever got the freedom of the city, I am inclined to think you will never get the freedom of another. But I don't know but what a bird in the hand is worth a great deal more than many in the bush, so I do not mean that as a suggestion, to in any serious way restrain yourselves.

Now I did come here this morning — we will say, with some difficulty because of arrangements which had long ago been made

in Albany which required my presence there, but I have been able to shift those things to the afternoon so that I might be here. I felt — and I say this in all frankness and with full meaning — I felt that I ought to be here. I am a public servant and you are public servants. You men occupy a peculiar official position. You are in part State servants, and on the other hand you are in part county servants; and your functions and those of the State Department of Highways are interlinked in such a way that your office is very important from your standpoint and it is also very important from the standpoint of the central office at Albany, and when you met as you do, once or twice in a year, I believe it is the full duty of the Commissioner of Highways to meet with you, and I gladly accepted the invitation that you extended to me to be here this morning.

Now, I see so many of you from time to time that in a way you might say that I have very little to say to you. Our relations are such that we are frequently thrown together regarding matters of importance in your respective counties, but it is only at these conventions that you are all together, and I wish to say a few words, though unprepared, to you.

It is easy and pleasant to indulge in generalities, and in a way it is necessary, on an occasion like this. I feel, as the head of the Highway Department, like reminding you of the importance and dignity of your office. In the every-day performance of your duties you probably forget that it has any dignity, especially when you are surrounded with a crying mob — I know that I forget the dignity of my own very frequently — but at the same time it is true that it has both dignity and importance, and it seems to me it is to be borne in mind at all times that your work and our work is the kind that the people of this State from the standpoint of public work I believe take more interest in than any other activity in the State. I have sometimes said that I believed the State was road mad. I say that to characterize the enthusiasm and the energy and the insistence which is at all times in evidence in regard to improvement of the roads in this State.

While I am here before you I feel like also making a plea particularly for roads that I am only in an indirect way interested in as Commissioner, but roads over which you have much more

full and important jurisdiction. I have the feeling now as we near the time when the so-called second fifty million dollars will have been entirely expended, like turning to that other very important branch of road improvement, and in a sense no less important than the State improvement, namely, local improvement of roads. I refer to what we commonly call the town roads. While much has been done and is being done, more must be done along those lines, working upon that class of road. We will soon have a State system — and I use the word State system in a comprehensive way to include what technically are called State and county highways — we will soon have out of the money made available by the people of the State a very comprehensive and, in a relative sense, complete system of main highways in this state. Of course, as you know, it will fall short of what the people want, and it will also fall short considerably of what in reason we ought to have. I think, however, that our attitude toward the subject of road building from the State standpoint should be this: that the second fifty million will be the end. Now understand me, gentlemen — because I am talking to officials of this State and of the counties of the State — I say our attitude should be that it will be the end. In other words, if we consider the question of road improvement in the respective counties of this State from the standpoint that the people will later make available other large sums of money for further improvement of highways, we may go far astray and certainly we will find ourselves in a sad predicament if the people in the future see fit to decline to appropriate large sums for the further improvement and State aid of the highways of the State.

On the other hand, if we take the attitude that the second fifty million will be the end and order our affairs accordingly, we will have a result which at least never will be a subject of regret on the part of our localities or of the State department at large. Use what is left of the second fifty million for the improvement of those highways in the State which are of the greatest importance to the greatest number of people. It is a simple and easy thing to say; and yet I find that in specific instances I am struggling against a tendency here and there which is quite to the contrary. It grows out of local conditions; some would say perhaps that

it grows out of selfish and sometimes political activity. But it does sometimes happen. And what I want very much to say, and I want it to be understood to be my aim and object — I want to urge upon the counties to revise, if necessary, their proposed plans of road building in order that the most important roads be built with the remaining money; and, on the other hand, the State Department will try to see that the remaining State highway moneys are expended where most needed, with proper and full regard to the fact that the highways as laid down in the law are state highways as distinguished from county or town highways; and therefore the attitude of the State Department will be in the main to use the state highway money with full regard to the county situation, but with a very keen eye to what lies beyond; in other words, make them what they are intended to be, State highways, get them connected together in a system which will serve a section of the State and not a county in particular.

This is very important, and in some counties very trying and troublesome, because there is not sufficient state highway money with which to complete the much-needed State highway system laid out within that section, and we are trying to discriminate within reason. We are open to conviction at all times, but we do want you to know that our principal object in regard to laying out State highways is that there may be a very comprehensive and connected system with the main object of serving the interests of the State at large rather than the locality where the highway happens to be situated. Fortunately I find that in almost all cases we may serve both without conflict and without injury to one or the other. The highways that are most needed by the State as a whole are also much needed and much asked for in the counties.

Having said that — and this is a good time to say it, commonplace saying that it is — let us have in mind that we have some twenty-five million of the last fifty million to spend and we want to make it go far as it will go toward the completion of our proposed system. And while we see, all of us, that we have not planned completely; that we will, when this money is all gone, have an incomplete system of highways, and when I say incomplete it has reference to the proposed system laid out a number of years ago when substantially it was proposed that ten per cent of all the high-

ways within the county be improved and therefore State highways were laid out with the idea that particular routes should be improved for the benefit of the whole State at large. We fall short of the completion of those systems, but by the wise use and the proper location of the highways in the future, to be built out of the remaining money, you are going to get in an essential way a complete system of highways in this State, though it may fall short of the system once proposed, and the proper location of the remaining highways to be built is of the greatest importance both to the State and the county. You men, officials in your counties, I beg of you always to have that in mind as you consult with your county authorities.

Now that is one thing, the system that the State is building and in a sense has nearly completed. Let me add one other word, that I may not be misunderstood. If hereafter the people of the State make more money available, all well and good — a thing I think much to be desired, a thing that in all likelihood will happen — but if you use your present money so that you put the roads in the best place that you could, if you get no more you feel you did the best you could; and on the other hand, if hereafter other funds are made available nothing will be lost and you can build onto what you already have.

Now I want to talk for a few moments about another class of highways, town roads. You, of course, know that there is a provision in the law for the creation of a county system. As a matter of fact, very few counties have availed themselves of the privileges and provisions of that act and very few of our counties have what we call a county road system. Now I have in mind that the day is coming when, we will say in a substantial way at least, the State will cease road building and devote its efforts to the maintenance of roads already built. May I say this to you gentlemen who have considered this, we may differ perhaps, but as I view it I hope the day may never come when the State ceases to exercise that function, namely, the maintenance of the roads that have been built under its care and largely with its money, and, that system being the one which it seems to me is the one that should be followed, then let us all, county and State, try and see that the State has a department and a personnel fitted to do that work as it should be done, economically and well.

But as I say, the day is to come when the State activity along the building will cease and then I have an idea that the county will, so to speak, take the State's place. To-day State aid in large percentage, with county assistance, is building the roads. In the future when the State aid is substantially expended, the county as the unit, as the directing and controlling body, will go on building and adding to the system which it already has; and the town taking the place of the county as at present the county takes the place of the State. So I am inclined to think that under the system where every county has a man in charge of its road affairs, the county superintendent, competent to direct road building, many of you competent engineers of long training, all of you with experience of great value, you in behalf of the county can take up and add to this wonderful system which we already have and under county auspices, but with town aid, add to the system.

Roads no longer belong to the locality in a practical sense. The travelers on your roads to-day may come — I met Pennsylvania and Ohio cars, and one from Quebec, as I came up the road this morning. County lines are gone and practically State lines are gone, and the stranger is in our midst, moving all over the State, using our roads. You have a road that leads from this beautiful city to the marvelous section just north of us here that the entire summer long is covered with travelers bound here for sight seeing, and they come from everywhere. Those roads we are building are not being used by the local people except in part, are not being used by the people from our own State in any exclusive way at all, but during the period of fair weather are being used by the people of the entire eastern half of the United States.

And peculiarly so is that true of this State of ours, just as a dozen years ago it was peculiarly true of Massachusetts. They had built many good roads; the country came to know it and travelers sought them out. At that time the difficulty was how to get across this State to Massachusetts at any time except after we had had a week or two of dry weather in the summer. That situation is changed, and we now can go practically anywhere in this State, to points of any importance, on improved roads, and within a year or two the small gaps remaining of important roads will be filled and we can say to all the country, all the states

adjoining us and the Dominion of Canada on the north — we have a system of roads which will take you at any time except during the snowy months, to all points, places of scenic, historic and commercial interest. Go as you please, choose what towns you may, and you will find good roads to take you. You need figure in no sense whatever on the means of transportation; they are built and they are at your service. Now that is what we are to have in a very short time in this State, and what to a great extent we have now, speaking from the standpoint of things of great importance in the State.

Now that condition, which makes the State roads now constructed used by the great commonwealths of the eastern part of the country, makes us sought out by the people of the western States as well as New Jersey and Pennsylvania, — that condition also applies in the county. The town no longer, from a county standpoint, owns and uses practically exclusively its own roads. A few years ago it did; a few years ago the man who drove more than 15 miles from home with a horse was rare, and the long journey that took a man away from the county was a great event, to be talked about for months. The town no longer owns and uses its roads exclusively. Therefore the county should step into the position the State has held for a long time and, with the aid of the towns, complete the system.

And later, and of course continuing it, the towns may take up these roads which are peculiarly local and peculiarly their own, and do them themselves. It seems to me it is logical. It seems to me that is the way it is going to come about, and therefore I take a little time to talk to you along that line, that you may think about it and talk to those who should be talked with at home, that it may be seriously considered. Talk it over with your board of supervisors and lay it before the board as to whether the time has not arrived when counties should very carefully consider the question of establishing a system of county roads, and then, as they may see fit, begin the work. Now some of our counties are doing it, and where I have seen the work they have done I am very proud of it, and I am glad to bear witness on behalf of the State department to the excellent work which is being done by towns, and combined town and county, in the State already.

And as I see it, and see that system grow, and see the mileage which is built in some of our counties annually, — and not always the big, rich counties with large cities, either — when I see that I feel like saying to men gathered together as you are, — consider it carefully, because really a great supplementary system of highways is already under way in this State and it should be continued, and the counties which have not yet taken it up at least should carefully consider it. And if I were the county superintendent and official, as you are, I would at least fully state the whole matter before the board of supervisors, so that at least you could say you had drawn their attention to all the possibilities.

Now do you realize in that connection — you men know, if the people of the State at large do not — that you have built, while we have built some 6,500 miles of improved roads, do you realize that while that has been done that the counties and towns have built over 4,000 miles of road in this State besides? We have prepared a map in our department which I think for the first time shows, without regard to any restriction, all the highways already built in the State and county system, and in addition to that it also shows all the highways which you gentlemen, at our request last winter, placed upon your maps and sent to us, which includes all the roads improved by the counties. The total improved mileage shown on the map is something like 12,000. I hope it will be useful, although it is somewhat crude, although cleverly drafted by the efficient young man who did it. That map shows, and the people will know, what the counties have done in addition to the State.

So consider at this time the question of getting a well organized system of county road building in your county.

Now there is another little thing. There has been appointed a commission in this State, of which I happen to be a member, with the State Engineer, to examine into the question of motor truck traffic and the like. You men well know that the huge vehicles threaten the very existence of our highways, and especially of our older highways. That commission is about to begin its work, a small appropriation has been made available, and we hope between now and winter to be able to get something somewhat complete to present to the next legislature of this State.

The legislature realizes the problem which is before us, and the commission was the result. I want to say to you gentlemen, as officials of the State, if anything occurs to you that would be of use — and you see right away what that sort of commission has on its hands — will you be good enough to communicate with the commission, of which I am chairman, and we will be glad to have your suggestions and your aid and your advice.

Another thing I think you should lay before your counties. There was passed in the last legislature a permissive bill by which the counties could return to the old system of years ago where the State paid 50 per cent instead of the one under which the State pays 65 per cent. That bill permits any board of supervisors to build all of its remaining highways on that method; in other words, it is for the county to choose. If your county wishes to have the money divided 50 per cent by the State, 35 per cent by the county and 15 per cent by the town, you may by vote so decide and we must act accordingly. Now that was done with the object of getting a little more money and spreading out the system. But of course you must bear in mind that at all times the county has a fixed sum, and this simply means that by getting some aid from the county and a little larger percentage in the smaller counties, you will get more mileages. You should lay the matter before your boards of supervisors when they chance to meet. We are all presumed to know the law, but very few of us do, especially the lawyers, and therefore it is quite likely that the counties are not aware of the fact that such a bill is a law in the State. I think two counties already have voted and are dividing their county highway money in that way.

Now I was asked to speak about another matter. Within a week or two we are going to straighten up this detour situation in the State, and we want your aid. I do not want to have any idea that there is a crossing of official functions, but we want to accomplish two things. We want to get pretty well marked detours where required; and there are here and there old detour signs, now useless, which still happen to be standing and nailed to trees and fences, and will you co-operate with us in our attempt to get rid of those old detour signs, because they are quite misleading to strangers.

Now, gentlemen, I thank you, first, for inviting me to come up here. I was very glad to come. I would like to talk about anything you wish, because I think the meeting is a very important part of your conference. I only wish, on the other hand, that I could go with you on the delightful trips planned, because I think you are in one of the very choicest sections, incomparable on our continent at least when we consider its scenery and historic associations. I wish you on these trips a most happy and joyous time, and I hope that because of your being together, communicating one with another, exchanging views and ideas, you will not only have a great deal of pleasure but will derive for yourselves and your counties a great deal of benefit.

I thank you for the invitation. I ask for harmony, for joint work; I ask in behalf of the State of New York, which has a great project on its hands, very difficult to carry out, filled with all sorts of problems, and all in the face of an insistent demand on the part of the public to have all that is coming to them either ahead of time or at once — I ask of you officials of the State of New York, partly connected with our department and partly with the road work of the counties, your co-operation, your assistance, and your good will.

Mr. Murray.— I am requested to announce that, in addition to the trips planned for to-morrow, the Glens Falls Cement Company will welcome visitors to their plant just below the city to-morrow morning. There will be time to inspect the plant and the more important processes of the manufacture of cement, before the cars leave for the regular trips.

Meeting closed.

STATE OF NEW YORK
DEPARTMENT OF HIGHWAYS

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STATE DEPARTMENT OF HIGHWAYS,
AT ALBANY, FEBRUARY 1, 1917**

Meeting called to order by Third Deputy Commissioner Benjamin J. Rice, at the Department of Highways, Albany, February 1, 1917, at 10:15 A. M.

MR. RICE.— This is the sixteenth semi-annual conference of the county superintendents of the State, and I wish to say that I want to thank each and every one of you for the hearty co-operation through the past year. It is a pleasure to me to go into the counties and receive such support.

I expected that Commissioner Duffey would be here to speak to us this morning, and I did not provide any program; but yesterday afternoon he received word from home that his father and mother were very sick with pneumonia. So Secretary Morris has consented to come down and just speak to you a few minutes.

I might say that my part of this program I prepared in the way of written statements, a report to the Commission, and some other information. I expect we may start some arguments, and those are good things for us to have. So when I have finished on these propositions I would be very glad to have suggestions from the various county superintendents, their ideas on the things that I shall touch upon.

The one particular thing I am going to speak of is sections 320 and 320-a, which I have heard considerable about among the county superintendents, and we have prepared some suggestions in the form of a tentative bill, and I want the views of the different county superintendents on them. There seems to be some difference of opinion among the boys as to how the money shall be provided for those roads. I would like to get that straightened out, either by some understanding or amendments. I do not think section 320-a, in its present status, is satisfactory to all of us; I don't think

it covers the ground fully. I might read my report to the commission after Mr. Morris makes a few remarks.

Mr. MORRIS.— The only thing I have to say, gentlemen, is to convey a message from the Commissioner. I presume some of you may know, if not all of you, the fact that he has a very difficult situation at home. Both his father and mother were taken suddenly ill with pneumonia, and I have just this minute talked with him on the telephone, and he said that his mother died this morning at half-past one and his father is lying at the point of death now. Of course, under those circumstances he had to leave suddenly yesterday afternoon and was unable to be here. He wanted me to come down this morning and tell you how sorry he was that he could not be here, and explain the reason.

Mr. DIEHL.— Inasmuch as we have received this sad message from Mr. Duffey's home, I would like to move that the secretary of this association wire to Mr. Duffey our heartfelt sympathy in the death of his mother, and our best hopes for the recovery of his father; and that flowers be sent, if there is any money in the treasury of the association.

Motion seconded and carried.

I have here a comparative statement of valuations throughout the State which I think would be of some interest to all of you.

DISTRIBUTION OF COST AND CHARACTER OF TRAFFIC ON TOWN HIGHWAYS.

There are over 70,000 miles of town highways, all of which pass through the rural districts, that is, none of these highways are located in any city or incorporated village.

There are 932 town highway districts, 467 incorporated villages, and 57 cities, including New York, within this State.

During the year of 1916 there was paid from the State treasury \$1,950,575 as "State aid," to be expended on the town highways, all of which are located outside of any city or village. In order to receive this payment of State aid, the rural district was required by statute to appropriate by tax \$3,500,000, all of which was levied and collected on property outside of any incorporated village or city.

The valuations of property in effect at the time \$1,950,575 State aid was appropriated and the \$3,500,000 was levied and collected by the rural districts are divided as follows:

New York city	\$7,857,889,860
Incorporated villages and cities, exclusive of New York city	2,439,262,459
Rural districts outside of incorporated villages or cities.	1,287,371,669
	<hr/>
Total valuation as equalized for State.....	\$11,584,523,988
	<hr/> <hr/>

The pro rata share of percentage which New York city, the incorporated villages and the other cities exclusive of New York city and the rural districts had in the \$1,950,575 appropriated as "State aid" are as follows:

New York city	\$7,859,889,860	
	<hr/>	= .678309258
	\$11,584,523,988	
Incorporated villages and cities exclusive of New York city..	\$2,439,262,459	
	<hr/>	= .210562165
	\$11,584,523,988	
Districts, outside of incorporated villages and cities, including New York city	\$1,287,371,669	
	<hr/>	= .111128577
	\$11,584,523,988	
	<hr/>	100%
	<hr/> <hr/>	

The rate of percentage which each taxpayer within the State had in the payment of \$1,950,575 "State aid" is as follows:

$$\frac{\$1,950,575}{\$11,854,523,988} = .0001683776$$

The tax which each taxpayer owning property in the rural districts paid during 1916 for the improvement and repair of town

highways varied from \$2.00 to \$10.00 per thousand of assessed valuation. The average tax rate which the taxpayers living in the rural districts paid is as follows:

$$\begin{array}{r} \$3,500,000 \\ \hline = .003259525 \\ \$1,073,776,251 \end{array}$$

From the above it is observed that the taxpayers owning property within the incorporated villages and cities paid sixteen cents and eight mills on each one thousand dollars of valuation for the improvement and repair of town highways. It is also observed that the taxpayers owning property in the rural districts paid on an average of three dollars and twenty-five cents and nine mills, plus sixteen cents and eight mills, on each one thousand dollars of valuation for the improvement and repair of town highways.

The motor vehicle has caused a revolution in the character of traffic on town highways. In past years this class of highways was used mainly for local traffic, but at the present day ninety per cent of the traffic on the more important town highways consists of vehicles owned by persons living in cities and incorporated villages.

In view of the statements cited herein, it is readily seen that the taxpayers within cities and incorporated villages are paying less than seventeen cents on each thousand dollars of valuation, and the taxpayers living within the rural districts are paying three dollars and forty-three cents on each thousand dollars of valuation, for an improvement used by the people of the State at large.

MR. DIEHL.— Will you have those figures printed, Mr. Rice?

MR. RICE.— They will be in our report.

MR. DIEHL.— You mean the annual report?

MR. RICE.— The semi-annual report of the county superintendent's meeting as usually published.

Now, as my particular part in this meeting, I wish to call attention to a few points in the maintenance and repair of town roads.

THE IMPORTANCE OF MAINTENANCE AND REPAIR OF TOWN HIGHWAYS.

The act of 1909, creating the source of taxation and maximum amount of State aid for the repair and improvement of town highways, has not been changed up to the present date, but the character of traffic has been revolutionized during this time.

Owing to the untiring efforts of the county superintendents there have been constructed many miles of improved town highways, permanent culverts and bridges involving the expenditure of millions of dollars by the towns with the aid of the State. The average amount per mile which is available for the repair and improvement of town highways is now approximately \$75. Therefore, to secure increased mileage of improved town macadam, gravel or other permanent type of road, it is necessary to draw from funds which should be expended for the maintenance of these improvements and protecting the millions of dollars that have been spent by the towns for such permanent improvement.

The agreement which provides for the expenditure of town highway moneys, as you are aware, must include a given amount for each mile of town highway in the town. In my judgment this amount should automatically be increased from year to year.

The amount of improved mileage is increasing from year to year, and there is a vast difference between the amount of money which must be expended for the repair of an improved road, and an ordinary earth road which has merely been turnpiked.

When a town has expended \$4,000 per mile to improve a town road of the macadam type, it is folly to believe that this road could be maintained at \$20 to \$25 per mile. This type of improvement would naturally attract automobile traffic to its local community, which is one of the prominent factors of destruction, and in my judgment there should be set aside at least \$100 a mile in the agreement each year for the repair of this class of road; otherwise it is a waste of the taxpayers money to pay for such an improvement and then allow these roads to deteriorate.

It is my desire, when discussing the agreements with the various town boards within your county, that you bring out these facts to the end that where towns have invested money for permanent im-

provements, that such investment should be preserved by setting aside a liberal amount for the upkeep of this kind of improvement.

In many instances, through zeal to secure a stone road, we are liable to forget that there are within the town improved roads which should be kept in repair before beginning any other improvement which is to be paid for from the town highway fund.

In past years, traffic on town highways was composed mostly of people residing in the rural districts, but at the present time this traffic, so to speak, is of a foreign element drawn from the various incorporated villages and cities.

As you all know, the town highway tax and State aid was intended to be used for the repair and maintenance of town highways, with no intention of furnishing a type of improved road which might be traveled each day during the year.

The demand for a subsidiary system of improved roads to furnish laterals to our wonderful State system of improved highways is being agitated in every county of the State. It is conceded that the traffic on the more important roads through the country districts, consists of vehicles owned mostly by persons paying taxes outside of such tax districts.

To develop this subsidiary system is a problem which confronts us regarding the sources of funds for the payment of such improvements. This naturally leads us to consider the valuations which are taxed for the purpose of securing these funds.

The valuations in the 57 counties, including the 467 incorporated villages and 56 cities, amount to approximately \$3,727,000,000.

The valuations of the districts outside of these incorporated villages and cities which is the basis for taxation for town highways, amount to approximately \$1,287,000,000. Therefore, in fairness to the taxpayers at large it can readily be seen that the cost of improving this additional system of roads should be distributed on each property owner within a county. This will allow the towns to continue the satisfactory method of caring for their town highways, and constructing an average of 800 miles of improved town highways of a permanent character.

Inasmuch as the people living in incorporated villages and cities using these improved roads through the rural districts form

a greater percentage than the people living outside of the cities and villages, it is my opinion that funds to pay for the cost of these improvements should be distributed on the taxpayers of the county at large, similar to the provisions of sections 320 and 320-a of the Highway Law.

This statute which now provides for the improvement of highways by aid of the counties is, in many respects, very unsatisfactory. The county officials in promoting a system of improved roads are very likely to overlook the fact that the cost of such improvements is beyond the means of the taxpayers within such local communities, and I believe that a limitation should be applied to such obligation. Moreover, there should be mandatory provision for the maintenance of these roads, similar to the provision relative to town and State highways.

As you are aware, the town must raise a minimum amount for the repair of their town highways, and each town must raise a fixed amount for the repair of State and county highways within their towns. The statute should also provide for a uniform method of supervision of the roads and expenditures of the funds in connection with the county road system.

We have prepared a tentative bill creating a new article in the Highway Law for the purpose of amending the statute, which allows the establishment of a county road system, and I will now read this amendment, and if you have any criticisms or recommendations to make, please do not interrupt until I have finished. Do not infer from this that we do not want you to criticise or to offer any recommendations, for we can assure you such criticisms and recommendations as you desire to make will be gladly accepted, but I would request that you do so in writing, or by taking the matter up in the open after the reading of this bill.

Tentative bill read by Mr. Rice.

Mr. RICE.—This is a 320 and 320-a proposition. I do not know that this bill which we have prepared will ever get into the Legislature, but I want to get the opinion of the county superintendents and will be very glad to hear from them at this time or in writing. It is a lengthy article, and we would be glad to receive written recommendations, or to meet with your legislative com-

mittee and go over the proposed amendment or anything that you may suggest.

Mr. DIEHL.—I would like to suggest that we discuss that now unless we have something else to discuss. It strikes me the most expeditious way to arrive at results would be to discuss it section by section. It appeals to me. I have been talking about the county unit in highway work and this is a big step in that direction. I think if we took it this far it wouldn't be long before going the rest of the way. I would like to make a motion that we discuss this bill now and discuss it section by section, because if we start discussing the whole thing we won't make as much time. I make that motion only on the assumption that we have not a regular program.

Mr. RICE.—I would be very glad to hear from the officers of the association.

Mr. COLEMAN.—There is no program.

Mr. RICE.—It is the opinion of the county superintendents that they would like to discuss this section by section?

(Motion carried.)

Mr. RICE.—This article is so long and there is so much to it and I know the boys are so much interested in it one way or the other, I fear that we won't get through here to-day or to-morrow on this matter. Personally, I would like to meet with the legislative committee, or whoever the county superintendents may designate, and I believe, as I say, it will take a day or two to go through this; but if you insist upon it we will start.

Mr. HODGMAN.—I think, as you say, that it will take us the rest of the week to go through this thing. Would it not be better to furnish each county superintendent with a copy and let us digest the thing carefully and then write our opinions to you.

Mr. RICE.—I think, myself, you could do that and then meet with your committee with those suggestions and go over the thing.

VOICE.—Transmit all views to our legislative committee.

Mr. RICE.— Send them to your committee and they can meet with us.

Mr. HODGMAN.— I can't quite digest that now.

Mr. DIEHL.— We are all together. I have a great deal of confidence in the legislative committee and I think we can send our suggestions to them, but there are certain things we think of when we are all together. I don't know how we can better spend two hours than in discussing that thing now, and the legislative committee would get some of the ideas. Of course, that does not preclude our sending further ideas to you, nor the legislative committee from talking to Mr. Rice. But, instead of talking about a lot of bunk as we often do, we could spend a couple of hours in going over this bill, and then you and the legislative committee can get together on it.

Mr. DAYTON.— Here is something essential. Here are men from all over the State and many of us do not want to delegate to the legislative committee our authority or desire to pass on that important bill; we want to say something ourselves. You can utilize the county superintendents to the best possible advantage in developing something in that discussion.

Mr. EVANS.—I have heard several remark they are satisfied with that as you have read it. Why not discuss it section by section, if there is any objection to any clause.

Mr. DAYTON.— Where we are all satisfied, we will pass rapidly.

Mr. RICE.— All right. Section 180. Adoption of County Road system.

Mr. DAYTON.— I want to enter an objection. I want to state one phase. The roads we have been building are not county system roads; they are simply town roads. They have had a little county aid and State aid. This provides now for a distinct system. You had the right — those towns who wanted to use it — sections 320 and 320-a provided for county aid roads.

Mr. RICE.— Not according to the Attorney-General, Mr. Dayton. He has rendered an opinion which we must work on until

that is changed, that they are county roads, and no money from the town highway fund (the basis of State aid) together with State aid, and no automobile taxes, can be used on those roads. And until that is set aside we are tied. Is not that true, Mr. Glynn.

Mr. GLYNN.— Yes, an opinion has been received to that effect.

Mr. DAYTON.— Well, there is a large amount of matter necessary to bring out which is a repetition of what is in the statute books. Cannot the same result be arrived at by amending 320 and 320-a, or putting in 320-b, in a few brief words so we can build town roads with State and county aid?

Mr. RICE.— Your idea is to have a new section whereby the county can aid the towns for the improvement of town highways.

Mr. DAYTON.— Yes, sir; that is what I want to do; that is all I want to do. Now if 320-a is correct — and it is, though the verbiage is poor — but I do not want to get away from the essential point that the roads we want to build are roads that are town highways, but they are as good as some other, and they are up to the standard, and they have been built at comparatively low cost. It cut out the contractors' profit, and other points. What I want to arrive at is simply some method by which we can let our counties give aid to the towns as they need it. If you put this measure through and prevent us from using the State aid and the county aid money and make the counties just raise funds and the poorer towns try to raise funds, you will kill the work that has been done. We have miles of road that we are proud of and it has not cost us over \$5,000 per mile.

Mr. RICE.— Mr. Dayton, in connection with a new article would you be in favor of providing some article or section in regard to maintenance?

Mr. DAYTON.— Yes. And if any of these counties want to build under 320 a contract road or under 320-a a contract road so that the counties can force the towns to pay a portion of it, and that is the desire they want to have, I don't see why you can't give an alternate proposition that would give us, some of us, the

opportunity to do as we want to do; make it free for all, and those of you who want to have it together, have it; but don't force us to come in where we are making good now.

Mr. RICE.— Under your present law, 320 and 320-a, as the Attorney-General holds, you are not entitled to use the town highway fund on these roads.

Mr. DAYTON.— I would not dare to dispute your Attorney-General.

Mr. BOWERS.— I want to endorse Mr. Dayton's statement there. That hits us in Steuben county; it is just what we want.

Mr. McEVoy.— In regard to that section, as I understand that is formulated for the purpose of helping counties that were not so well financially as the counties under your section 320. Under section 320 it had to adjoin a city —

Mr. RICE.— Mr. McEvoy, just allow me — I think that was a provision of law — which provided that a county adjoining a city of the first class, such counties as Westchester, Nassau — or a county containing a city of the second class might establish a county road system.

Mr. McEVoy.— We want to get rid of the overhead charges, so 320-a was passed to assist counties that would do it in another way. Now several have started under 320-a to build roads and calculated to do it in the same manner as town highways have been built, by force account. It seems to me if the law is repealed so it puts it all under the one system it would stop the improvement of roads under the county system as now established in some counties; and in order to obviate all the expensive overhead charges 320-a was a relief to the counties and it seems to me it ought to be left. I would be in favor of some amendment which would make it legal to use the town and State aid the same as it has been done.

Mr. O'BRIEN.— What would be the status of the roads already constructed under section 320-a if this new article were incorporated in the highway law? Could we place those in the proposed county system, roads already constructed? We have a matter of 60 miles already built in the county. What would their standing be. Could we declare this a part of the county system?

Mr. RICE.—I don't know any reason why that could not be done. I think, gentlemen, it might be well to have a motion that you refer this section to your legislative committee, this particular or added section — you may call it a new section.

Mr. DIEHL.— Won't it all go there anyway?

Mr. RICE.— You will want these records, and as soon as we can prepare them you can get them to your legislative committee and let them act upon it. I think a motion to that effect —

Mr. DAYTON.— I would be glad to make a motion that the whole subject matter be furnished to the legislative committee and the minutes furnished and they be authorized to confer with the third deputy.

Mr. DIEHL.— How about having another meeting in about two weeks? Let the legislative committee formulate a report and bring it back to us. I agree with you about not letting the other fellow represent you too far, unless you are sick, and I think the little discussion we are having is very good, and I had that further in mind, to call another meeting within two weeks and talk it over. It is of so much importance we do not want just a single committee to represent 932 towns — conditions are so diverse. I come from the richest county that operates under this arrangement, and yet certain towns are in entire sympathy with what Mr. Dayton says. In this wide State you should have as much latitude as possible, but what we are looking for is to get roads and have them maintained; we want to give all the options we can.

I think the motion is proper to refer to the legislative committee — that don't shut off discussion now — and let them call another meeting.

On motion, the privilege of the floor was extended to Mr. Kellogg, supervisor of Steuben county.

Mr. KELLOGG.— How about the system including roads designated as State roads?

Mr. RICE.— All roads are town highways until taken over or built by the State. No road is a State highway until taken over by the State, so that would not affect you.

Mr. EVANS.— Either I didn't understand, or somebody else didn't. The way I understand it, your scheme is to make the villages pay their share of the roads. In our county we have a peculiar situation — I was there two or three days ago. Dryden is anxious to build a certain road leading to Virgil, and another town is anxious to come up and get the trade. We are anxious to construct the road and hold the trade in our town. Now, as I understand you, the village of Dryden is practically exempt from taxation for paying for something they are getting the benefit of and that is paid for by the farmer.

Mr. RICE.— No; that is against the whole county. We get the money from cities and villages.

Mr. McEVoy.— When a county appropriates money for a road the villages pay the same as a town. It is a county charge without any further legislation.

Mr. RICE.— The present law is that now; the villages have to pay their share.

Gentlemen, there is a motion before the house that this be referred to your legislative committee, as to the first section, 180.

Motion seconded and carried.

Mr. McDONALD.— Does that preclude our getting a copy of the proposed bill?

Mr. RICE.— No; we can send that to each county superintendent.

Is there anything on section 181 — County Road Commission?

Mr. DIEHL.— That provided that three men must be appointed to constitute that commission, with a certain compensation per day. Now possibly in some counties a good roads committee of the board of supervisors might like to act as such commission. I don't think that is broad enough. Our road committee don't care for per diem allowance. We meet once a week, and we don't want to designate this work to other men. They probably want to handle it, and are capable. I suggest that it be broadened so that the personnel and the compensation be left to the board of supervisors of the county, who represent the people who raise the money to build these roads.

If they want a commission of three outside men, well and good; if they want their good roads committee, all right. Make it broader, so that each county can work out its own salvation.

Mr. RICE.— I might say that it is optional with the board to appoint their good roads committee.

Mr. DIEHL.— Well, that provides for three. We have 14 members on the good roads committee. We seldom have a meeting that there is not 12 members present, and they meet once a week. They are interested.

Mr. RICE.— Perhaps that is a good suggestion, and we are willing to receive it.

Mr. DAYTON.— That is one of those particular questions that you can do as you please; that is not essential. But I think the supervisor who helps raise the money ought to be responsible for spending it. I don't think anyone ought to be in that commission unless a supervisor. You need the personal touch with the taxpayers and you can get that through the elected officers. Please read that section.

(Section 181 read by Mr. Rice.)

Mr. DAYTON.— Could not you change that, that they will appoint their county road commission, who shall be such members of the board as the board of supervisors may designate — not limit it?

Mr. RICE.— I don't see any objections to that.

Mr. HODGMAN.— Under that county road system, would that apply to roads already authorized for construction next year.

Mr. RICE.— This don't apply to anything already passed upon only as regards maintenance. It affects no county that has passed any resolutions or obligated themselves in any way, unless they pass and rescind their former resolutions.

Mr. DAYTON.— The 24 days in one year feature of section 181 won't do. Strike that out and let them make their report to the board of supervisors. When you are doing work you have got to

have that committee together. If they are worth anything you need them. They have got to see the work and audit accounts, and you can't get along with 24 days.

Mr. RICE.— Our idea is that you probably would not be active more than six months in a year, perhaps seven months.

Mr. TIBBITTS.— There is another point — I believe the term of office is suggested as one year. Some of them ought to hold two, if not all. It would be better to have them carry over some.

Mr. DAYTON.— They could not carry more than two years.

Mr. TIBBITTS.— If they were persons they could; and if supervisors, not. I would like to have that optional.

Mr. RICE.— Anything on section 182 — Section 183. Do you want that section read?

VOICE.— No.

Mr. RICE.— We felt that the question of maintenance should be compulsory upon the county or town in some form in fixing that estimate, so that they would be compelled, the same as you are on town highways, to raise a certain amount per mile per year for the maintenance. Section 184 — Board of supervisors may authorize county or town to borrow money and issue bonds, etc.

Mr. DIEHL.— I think the limit was too small. A town valued at \$300,000, one-half of one per cent. would be \$1,500, which is not enough.

Mr. TIBBITTS.— We are in the same fix, only we have a lot of those towns.

Mr. RICE.— That is a matter of opinion.

Mr. DIEHL.— That is one of those things I think you ought to give a little more latitude to.

Mr. RICE.— Section 185. Cost of construction; division of expense; exemptions to such division.

Mr. DIEHL.— Why not let the board of supervisors fix the percentage of cost between county and town? They know all the conditions. Sometimes there is a town without bonded indebtedness which is willing to pay. Let the board of supervisors figure it out.

Mr. NOSTRAND.—In my town there is a valuation of \$2,000,000, and only 20 miles of road. Where would we be?

Mr. DIEHL.—The maximum is 25 per cent., which they would pay. We have towns in our county paying 30 per cent., and glad to pay it. If they want to pay it, let them. We don't want to restrict them to 15 per cent. if they want to pay 30. That is a thing the board of supervisors could use their judgment on. Say, the percentage shall be fixed by the board of supervisors. That takes out a lot of words and covers the grounds. You don't care what percentage it is so long as the fellows at home are satisfied.

Mr. BRENNAN.—Just to indorse what Mr. Diehl has said is all I wish to say. In our county the division has been 30 per cent. to the town and 70 per cent. to the county. However, there is a proposition before the board at present for an equal division, and as the city supervisors outnumber the town supervisors more than two to one, limiting the town's share to 25 per cent would kill all those roads.

Mr. RICE.—Have you any conditions in your maintenance proposition where the towns don't pay anything out there? Do you have any trouble in this respect?

Mr. BRENNAN.—Yes.

Mr. RICE.—The towns refuse to pay the maintenance?

Mr. BRENNAN.—On some roads, yes. I am in favor of making it obligatory upon the town or town and county to maintain the roads.

Mr. TIBBITTS.—We are not having any trouble under the present law getting the maintenance. There is a resolution adopted by the board of supervisors and it is fixed.

Mr. RICE.—We do have that trouble, however, in some parts.

VOICE.—Well, the board of supervisors have the key to the situation. If the towns want the roads they have got to subscribe to the maintenance.

Mr. RICE.—I should be heartily in favor of some legislation where they are compelled to raise at least a certain amount per

year in some form, because in some counties they have not done that. They have had friction somewhere that caused them to lay down.

Section 186. Plans and specifications.

Mr. DIEHL.— That goes into the days of advertising. You call for advertising for three weeks. That is the same as State and county highways. You don't have to advertise that long in the county.

(Section read by Mr. Rice.)

Mr. DIEHL.— Where you say gravel, macadam or other types of roads, I think that is wrong. You can prescribe sand, clay or dirt. Gravel should be the poorest type of construction in this county work.

Mr. HODGMAN.— There are some towns have no gravel or stone.

Mr. DIEHL.— Do you think this money should go to build earth roads?

Mr. HODGMAN.— Sand-clay.

Mr. DIEHL.— If you think the county should settle it themselves, I agree with you.

Mr. RICE.— Section 187. Acquiring rights of way and material; elimination of grade crossing.

Mr. DIEHL.— That is clear, but I want to object to grade crossings, because the money for grade crossing eliminations will take too much out of this fund. There is a provision in the present law of one-half paid by the railroad and the other half by the State and the locality one-fourth each, and that half taken from the highway fund. The Public Service Commission ruling on a lot of crossings is that it is not within their jurisdiction. That would deplete the highway funds too much to start abolishing grade crossings out of the highway funds, and Commissioner Duffey has made a ruling that he won't use that money for them. The State and county funds are not big enough to stand it. The automobile organizations are advocating a bond issue throughout the entire State for that purpose. I think if you start abolishing grade crossings out of this you will deplete it too quickly.

Mr. HODGMAN.—How will you estimate on rights of way? Why not leave that a county charge? Otherwise, it will take a month or six weeks to get a right of way. You cannot tell in the estimate what the right of way will cost.

Mr. RICE.—Before any road would be built or let you would acquire the right of way.

Mr. HODGMAN.—We build on force account.

Mr. MICHELL.—In the matter of securing right of way for State roads at present will the same *modus operandi* apply.

Mr. RICE.—This does not affect the State roads.

Mr. MICHELL.—I understand it don't affect the State or county highways. But you say the commission shall secure the right of way. How will they secure it?

Mr. RICE.—They will have to go through certain forms which the statute prescribes.

Mr. DIEHL.—You might say the provisions pertaining to State and county highways shall apply to county roads.

Mr. MICHELL.—I would not want to approve that. As I understand it now, if we build a county highway under a condemnation proceeding we are permitted to inject in the evidence the value that may accrue to the property by which the improvement is made. Under the present condemnation proceedings of State highways that element is not allowed to be injected in the evidence. It is all damage. From the experience I have had in securing rights of way for State highways I have been impressed that that law is lame. For some reason or other it is dropped out of the law in the condemnation proceedings of rights of way.

Mr. DAYTON.—That brings up one point that is essential. The rights of way on State roads — they get all they can. Under the way we have been building town roads, by county aid, the people see we control it enough so that we don't have to have the right of way unless we want it, and we have our rights of way in many cases contributed. You are taking something that the people are in favor of, through the personal touch of the supervisor and town

superintendent; it is their road. You are trying to put into it the clause where there will be the antagonism that has been developed in some cases with State roads.

Now, these discussions have been in regard to county roads. I still want to make clear my position is that I am fighting for a method of building town roads with county aid, and I ask that that can be amended so I can continue to do that. I haven't any interest in these other questions that are coming up.

MR. TIBBITTS.— I heartily agree with Mr. Dayton on that proposition. It will put a quietus on our building roads.

MR. DIEHL.— Check No. 2.

MR. McEVoy.— Inasmuch as there are two classes, 320 and 320-a, why wouldn't it be a good idea to exempt 320-a from the provisions of this law as proposed; and any part of 320-a that needs amending so as to comply with the Attorney-General's provisions, that could be amended.

MR. BALL.— I was late in getting here this morning, and have just got my eyes open. If you kill 320-a you kill your county aid roads in my county. I am against it all the while. What we want to do—it was through an effort to get 320-a amended so that the supervisors could bond for any or all portions of their aid money that made 320-a in the condition it is. I think I am partly responsible, although someone got the joker in there. The only idea was to amend it to allow the county to bond for any or all their portion of the county aid, which was not allowable under the law as written.

So far as discussion of county roads as per 320 is concerned, I think they are absolutely useless. The minute you cut out your county aid to towns and cut out your State aid money so that the towns cannot use for grading and sluicing, you annihilate the county aid road system, as we call it in my county.

MR. RICE.— Section 188. Supervision of county road system; contract or payroll system; State Highway Commission to prescribe system of accounts; prison labor.

Section 189. Maintenance of county road system; annual report of the county superintendent of highways; accounts to be examined by the State Highway Commission.

Section 189-a. Duties of town superintendents on county roads. Gentlemen, this covers the sections.

Now, these minutes will be printed and these copies we will strike off and send to each county superintendent with a copy of the minutes attached and the discussion. You can take that up with your committee, or meet at such time as some of you have suggested and go over this thing later. If there is nothing further on this matter at this time —

Mr. DAYTON.— I was going to suggest as an alternate proposition — although I have the greatest confidence in your judgment — that somehow it should be brought before the legislative committee, a method of amending section 20-a so as not to entirely do away with it. The bill as it is does not contain the provisions that would enable us to build county aid roads. I don't want to see this thing passed, and in leaving it incomplete it does not reach to the meat of the cocoanut that I am interested in.

Mr. RICE.— I do not know as this will pass. It is simply brought up for the information of the county superintendents, to get their expressions and ideas.

Mr. DAYTON.— Then, in order to do that, I would like to make a motion that the committee be instructed to arrange for the amendment of sections 320 and 320-a, so as to comply with the law and provide for the use of the State aid money in the construction of the town's share on these county aid town highways.

Mr. RICE.— How would the department come in?

Mr. DAYTON.— All these roads are under the jurisdiction of the highway department. We cannot take a step. An audit of accounts is provided for in the auditing system. Your field men check up every penny expended. Every penny is expended by the board of supervisors; it goes through the town highway fund. You have jurisdiction in regard to the agreements, because you can say how much the town shall spend. The whole thing is under the jurisdiction of the department.

Mr. RICE.— We have absolutely no authority in connection with the county roads in any way.

Mr. DAYTON.— Then I want to get something to give you a chance. Oh, I am talking about county aid roads.

Mr. RICE.— This is 320 and 320-a roads at present.

Mr. DAYTON.— I want to arrange to give you jurisdiction. I hold you have it. I supposed you had it.

Mr. RICE.— Not under the Attorney-General's opinion.

Mr. DAYTON.— We have not turned a wheel without submitting our reports to you.

Mr. RICE.— That has been done up to the past year.

Mr. DAYTON.— And we are doing it now.

Mr. RICE.— Under the present interpretation we have no authority over 320 and 320-a roads.

Mr. DAYTON.— Well, it does if we account for the amount of money received from the county the same as the amount of money received from the State, and include that in the total receipts and disbursements and make ourselves responsible for it. And if that is not done, it should be done.

But what I want to do is to make this resolution so that the legislative committee be instructed to arrange 320 and 320-a to have the technical objections that now exist obviated and allow me to continue my county aid roads.

Mr. DIEHL.— I would like to second the motion and make it broader; that all the subject matter be referred to the legislative committee; that they be requested to revamp this proposed law to make it applicable to all the counties and give the counties the largest possible jurisdiction over the work; and that section 320-a be not repealed, but rewritten, to give the State department complete control and take out the inconsistencies in the present statute; and that the committee notify the president, and he call us together again in Albany; and if possible that a report be sent to us all to study before we get here. If we are going to do it at all we might just as well do it right.

Mr. BALL.— I want to say right here that I have worked seven years in order to get more money for highway purposes, and under

section 320-a of the Highway Law last year the board of supervisors voted us \$95,000 and this year \$105,000 — meaning \$200,000 added to your town highways that you could not have got under any other condition. If you repeal 320-a it is “good night” to the rest of our 350 miles in our county.

Mr. RICE.— What is your opinion the average amount per mile on the town highways should be for general repairs of town highways?

Mr. BALL.— Not less than \$25 a mile; and that your superintendent should under no circumstances be allowed to break a stone or begin any construction until he has been over every mile of road and put it in shape. We never expect to start any of our town roads by county aid until in June.

Mr. RICE.— I think that is a very good point and I am very glad you brought that out, because I am afraid there are some places or towns not doing that, in some parts of the State.

Mr. DAYTON.— Make the law, then, so as to cover that. You can make it even more stringent than that.

Mr. BOWERS.— This amendment should be made in a way to let us go on. Our county has already appropriated \$100,000 for next year's work. We do not want to be interrupted. We are handling it the same as Mr. Dayton mentions. Everything goes into the highway fund. We don't want to be interrupted. The bill should be so drafted as to let us go on with the work.

Mr. MACE.— I move that we adjourn until two o'clock.

(Motion carried.)

AFTERNOON SESSION, 2:30 O'CLOCK.

Mr. RICE.— This afternoon I expect the session will be short. It seems that a number of the boys want to get out early for home. I have two or three things that I wish to call attention to. The first is the automobile tax, as passed last winter, whereby the county receives 50 per cent. of the auto tax collected in that county, for the construction of permanent town highways. We have sent our

instructions to the chairman of every board in the State — and I think copies, perhaps, to the county superintendents, stating our attitude and recommendations. I think a large majority of the counties are perhaps carrying that out. We have had some counties that have not.

My idea is that the automobile tax, as received by the county treasurer, should be expended upon some road or roads in one town or two towns, as the funds will permit, but absolutely I am opposed to the scattering of that money all over the county in pro rata shares, whereby they will receive in some counties, for instance, \$39 in one town. These moneys must be passed upon by your board of supervisors and distributed to the town or towns; the supervisors accounts for that in his H. B. & M. report, and is accounted for on the agreement. He must give a supplemental bond, also. And before that money can be expended, that agreement must be approved by the commission. Now, a great number of the counties have already passed resolutions in providing for that fund, whereby one or two towns will receive practically all the money of that county. I have one county in mind that has already started some work. I am very much pleased with the resolution as passed by the board and their method of handling that tax, and I would like to call upon Mr. McClintock of Monroe county to explain what they have done in that county.

Mr. McCLINTOCK.— You will have to have patience, because I cannot talk loudly, but after I tell you a little I am going to throw it onto Mr. Cribb, because whenever we do anything nice in Monroe county we give him the credit. On this automobile money, as nearly as we could figure, we would have about fifty or sixty thousand dollars during this year, and we made out a plan to take five pieces of road, regardless of anything else. I have a hobby in this cube pavement, and I thought it would be a good opportunity to try it out. So I picked out five pieces. And one piece would have sandstone for foundation; another piece would be of local gravel; and another of broken slag; and the other piece, on an old road that had been built by the town, about five feet wide, of local sandstone; but we widened out with granulated slag, something we can get cheap. In other words, we are trying several things with that money. It has developed so that we will have, instead of sixty,

about seventy-five or eighty thousand dollars. So the board added a condition, in allotting the money, that the town that took the money should raise 15 per cent. immediately. While I had this plan all made out for the five roads, by some carelessness on the part of some of us, they got in petitions which would take about \$250,000 to finish. Some of the towns are willing to put up 50-50, so it looks as though we have a nice entering wedge. In the meantime, one of the pieces of road, along the shore of Lake Ontario, in the town of Webster — this is a special job of Cribb's — they worked there last fall until snow flew; 30 or 40 teams; all the money spent locally; and they put up \$2,200 by subscription. On the other road they also subscribed \$2,200. So we are making a good start. Those fellows have hauled out already something like 2,000 or 2,200 loads of stone off the farms alongside. It is not worth a darn to build a road with except to put the surfacing on, and, incidentally, one of the farms is worth two or three thousand dollars more just by the cleaning up. Everybody is delighted locally.

MR. RICE.— I am obliged to you, Mr. McClintock. Mr. Cribb has a district composed of those counties in that part of the State, and I think he has the system working in almost every county, and I am going to ask him to tell us what they are doing in that district.

MR. CRIBB.— I want to say that it has been very gratifying to me to know how the distribution has been made of this automobile money that has been received and to be received in my district. Mr. McClintock has given you a very nice idea of the work. I don't think he made it clear to you that 15 per cent. was paid, added to the money that was allotted to each of these towns, and in addition to that 15 per cent. there was \$2,200, or nearly that, in two of these sections. In Monroe county it would be a pretty hard matter to stop that kind of work. As he stated, the people are more than pleased with it, to my certain knowledge — and he said it was my pet job. I want to explain that pet job just a little bit.

For the last few years everyone of us has been hearing about McClintock's cubes, and it has been possible to get only a short strip of the real McClintock cubes laid anywhere in western New York. On this occasion, the proposition was to lay $2\frac{1}{4}$ miles, and when

this work is done and the travel has been on that road, we will know what there is to McClintock's cubes as a road or to maintain other roads, that is, to repair any other hard-surfaced road.

He did not explain just what they had done. I want to do that at this time — not that I expect every other county will or can do just what they have done in Monroe county — but on this first section (we will say the Webster road), Mr. McClintock took me over that immediately after the automobile law was signed, even in the mud; later, better; and still later he went over it again with me, and when the time came for the plans and specifications I went with him again, and we went over the section there where we could be provided with all the field stones necessary for the base. Mr. McClintock is right here. I would like to say that he was opposed to the field stone base a little bit, but I invited him to go with me and look over a field stone base under construction, and if he was satisfied that it was good he would adopt that plan. Now I want to say to you that we spent nearly a day on the road, and that day I believe was well spent, from the fact that Mr. McClintock simply adopted the field stone base and that road is being built under plans and specifications very carefully, and, if I remember the plans and specifications correctly, first it was surveyed by Mr. McClintock himself — no help except somebody to carry the chain or something like that — and the drainage was cared for, and then came the grade of the road, then the width, and the top surface, and the whole business was taken up in detail, and the result is this: On that particular road they are laying a field stone base 18 feet wide of field stone thoroughly rolled, and something over a mile of that has been laid and is in use right on that field stone base, and it is way ahead of the clay-mud that was there before. On this base it is proposed to put a covering of gravel, thoroughly rolled, and then a sand cushion, and upon that you will have thirteen feet and a half of McClintock's cubes, and the shoulders taken out to the eighteen feet of gravel; and if that won't make a good road I'll be mistaken.

I know all towns cannot do that. I was asked the question the other day in Wayne county, if they were obliged to connect with that road and build the same kind of road, and I said, no. Well, they said, will it be approved in Albany? I said, certainly it will.

They pointed to a road, built last year, field stone base, macadam top, and I assured them that would be approved. A road of that character would be approved, wouldn't it, Mr. Rice?

Mr. RICE.— Yes.

Mr. CHIBB.— That is the condition of that road. Now he has told you of the other roads. I expect that to be one of the roads as good for all purposes as the State roads; I have every reason to believe it.

In Monroe every supervisor that comes in with a petition for any part of the automobile fund has brought in with that the 15 per cent. of the total cost which the town will bear. And of course, as he has stated, the donated part comes in addition to that.

I will leave Monroe county there, because I don't want to take too much of your time; but in my district six counties — I want to take up a little time with each county.

In Ontario county I was asked to meet the board of supervisors to go over some roads for improvement. I was asked about the system they had adopted in Monroe county, and the result is they first made their map; they took sections that would either connect one State road or township macadam road with some other road, or else made an improvement from an improved road to some place. And in that county to-day they have started and are at work, not as extensively as in Monroe county, but they have started work on two sections under the automobile fund, and they also put up the 15 per cent.

Now I want to speak of Wayne county in two ways. I believe the board of supervisors of Wayne county weighed this thing very carefully, and in their best judgment this was allotted, when the resolution was passed by them this automobile money was allotted according to the mileage of each town, and Mr. Rice spoke of one town receiving \$39, and one town that I know of would receive \$92.40. Now then, that was rescinded, if it was ever passed entirely; and to-day I want to say to you that Monroe county is right along the line with Ontario county; and any county that has an assessed valuation of about the same as Ontario, Wayne or Wyoming county; that plan will be in perfect accord with the commission here in Albany; no doubt about that.

Then comes the little county of Yates — nine towns in the county. I was before the board of supervisors and we spent nearly a day in going over the matter, and the result is that they have allotted all of the automobile money in Yates county to go to the town of Italy, that has no State highways, no State and county highways, nor other improved roads. But the 15 per cent. is not raised there, from the fact that this town really is a very poor town if you come to dollars and cents. Then in Livingston I met the board of supervisors and they have allotted that money all to the town of Ossian, and the 15 per cent. also is provided there. So you see in those counties how they have taken care of it. Wyoming county has provided for the allotment of that money where it cuts through the corner of two towns, Gainesville and Geneseo Falls. That shows what the intention of those counties is in regard to this money, and it shows to you that that money will be expended in many ways where it would be hard to get any other kind of improvement. And it is so in all of the counties that I have to-day, every single one of them. They have taken care of it, and in no place do they propose at this time to expend it expect for permanent hard-surface roads, and also to connect as I have stated, either some improved roads or start with an improved road and reach out on a road that ought to be improved and a road that is likely not to receive improvement from the State or county highways or any other improvement.

If there are any questions you want to ask I would be glad to answer them, but I want you to know that the six counties in the ninth district have taken care of the automobile fund to my satisfaction and I am sure that it will be to the satisfaction of the commission when they get their agreements. And they fully understand that they must give a bond for that and must be absolutely separated from all other funds and must show just where they have done the work or intend to do it.

MR. DAYTON.—Don't you pass it through your No. 1 highway fund on your supervisor's book?

MR. CRIBB.—We have not yet. The work was started very early and we sent in one agreement down here that provided for all of the allotment for one or two roads, but that was returned

and the new agreement was made which provided for the money that was released and in their hands, and it has been kept absolutely separate up to this time.

Mr. RICE.— I might say in connection with Mr. Dayton's question that the automobile tax is handled the same as item 1; it is provided for in the agreement as a special appropriation, A, B, C, etc., for some particular road or roads in that town.

Mr. DAYTON.— Specifically, in my county the board of supervisors have directed that the automobile license money be divided 50-50 between two towns. Those towns are ready to make their agreement. We don't know just how much the automobile fund will be. Would it be sufficient to designate the automobile money, "whatever amount may be received" from the 50 per cent. for the construction of this one particular road, and give the type of construction?

Mr. RICE.— You will have to have the funds available before you can enter into an agreement that we can approve here. That will have to be done by a resolution of the board conveying it to the town.

Mr. DAYTON.— The resolution has been passed directing the county treasurer to pay the funds that may be received. It is up to the department to order how you will spend the money. We will put it in your jurisdiction; you will tell us how to spend it.

Mr. RICE.— That money will be available within the next 30 days, or the large part of it, in your county. You will get your January or February licenses, which will make a large part of that fund. The large bulk of it comes in the first three months of the year. You can make a supplementary agreement later if you wish to.

Mr. TIBBITS.— In setting aside this sum from the automobile funds for permanent work, if there be a balance left after the work is done does that balance lie with the town's automobile money or should it be returned to the fund in the county treasurer's hands?

Mr. RICE.— How about that, Mr. Glynn?

Mr. GLYNN.— It would be held intact as motor vehicle money and should be used towards the permanent improvement of a town highway.

Mr. TIBBITTS.— Would there be any objection if the supervisor paid back? I have in mind one piece of road and we want to set aside enough to cover it. The board don't meet but once in three months, and we will set aside a little more than enough. Could not the supervisor simply pay back to the county treasurer, showing that payment by an order of reimbursement to the county treasurer for funds, the town superintendent draw an order, and have it all appear in the books as money paid out?

VOICE.— The supposition is that there will be no more money spent in that town. I think perhaps that the supervisor could refund that to the county treasurer if he saw fit.

Mr. McEVoy.— I would like to ask, for instance, if the supervisor has got to give a special bond for this automobile fund. Now assuming that the automobile fund this year would be as much as last, say, for instance, in my county \$6,000, half of it, \$3,000, would go to the county. The supervisor would write his bond to cover the full amount he would assume to be coming?

Mr. RICE.— He would give a bond for that \$3,000, and supplementary bond.

Mr. McEVoy.— If he does that wouldn't he be liable to turn that back to the treasurer if he was under bond?

Mr. RICE.— His bond, I suppose, would expire when the fund was expended, audited and accounted for.

Mr. McEVoy.— Would not it revert back to the reserve fund?

Mr. RICE.— It could by apportioning it at a later date for the permanent improvement of a town highway.

Mr. BALL.— I don't want to antagonize the Highway Commission, but we understand that the Highway Commission can make rules and regulations not in conflict with the Highway Law. The law states that the automobile money can be used for construction

and improvement of town highways. Now if you construct a house, you build one, or a road; if you paint your house, you improve it; if you paint your road, you improve it. We have paid our money out for the improvement of roads, meaning oiling. That has been done already. The letter received from you said that would have to be used for hard surface. Our contention is that the oiling is an improvement.

Mr. RICE.—Don't this say for the construction or improvement; it don't say for maintenance or repair.

Mr. GLYNN.—It says, permanent improvement.

Mr. RICE.—There is no doubt the intent of that bill in my mind is that it was for the construction only.

Mr. BOWERS.—In regard to this bond question, can this account be included with the other bond and specified as included in that amount?

Mr. RICE.—Yes. The supervisors' receipts would indicate the penalty of the bond and might be included in the highway bond prescribed by section 104.

Mr. BOWERS.—Then again, in regard to the surplus being left. If there was a balance left could not that be charged to some other road by supplemental agreement.

Mr. RICE.—I suppose so, if there was enough left to amount to anything.

Mr. LAY.—I would like to ask what you mean by hard surface road. Do you mean limestone top or gravel top?

Mr. RICE.—I would say a road with a stone base and gravel top, or stone road with limestone top, or macadam type; perhaps some types of gravel roads.

Mr. LAY.—Of course, we have in our county lots of gravel, but some of it is soft. I do not call it a hard surface road, but it is the best material we have to work with.

Mr. RICE.—Well, you have lots of field stone. That would apply to roads of that type.

Mr. PECK (Onondaga Co., assistant to Mr. Bogardus).— I simply wanted the estimated cost of that “pet” road in Monroe county.

Mr. CRIBB.— The estimated cost of that was in this way: the allotment from the automobile fund was \$25,000 —

Mr. PECK.— I referred to the mileage.

Mr. CRIBB.— This was for $2\frac{1}{4}$ miles. You can figure that out. And in addition to that there was the 15 per cent. of the total cost, and in addition to that also was the very nearly \$2,200 that was given. That was the money which has been provided for that, and they started to work, and there was a memorandum attached to the agreement that was approved here in Albany which specified the class of work and the length of road and the conditions of that character, but it only cited in that the amount of money that was then in the supervisor's hands. Since then more money has been turned over to the supervisor, and will be, as money is received.

Mr. PECK.— What is the thickness of the sub-base of the field stone bottom course road?

Mr. CRIBB.— Not less than six inches.

Mr. VAN TASSLE.— I would like to ask, how is this 20 or 50 per cent. that is raised by the towns to supplement the automobile money, how is that raised by the towns?

Mr. RICE.— Mr. Cribb, I will call on you for that.

Mr. CRIBB.— There has been a question about that — but there has been no lack of money. The town boards simply have met and provided for that money as a town charge; and in Monroe county they did that through the town board; and in Ontario county and in all of the other counties where they have paid the 15 per cent., they have provided it in that way.

Mr. EVANS.— I don't understand one question. Now, with the automobile money in our county, we put it all on one road. Can we do the drainage out of that money or must the town do that, and only use the automobile money on the road?

Mr. RICE.— Such money could be used for drainage in constructing a highway, but not on any culvert over five feet.

Mr. EVANS.— Finish the whole thing out of one fund.

Mr. RICE.— Yes.

Mr. VAN TASSLE.— I don't like to go back to my county and ask a town to raise a certain amount of money to supplement that, and they ask how can they do it legally. How can we get it?

Mr. RICE.— You can do it in your estimate. That is a sure way of doing it, using perhaps an amount that you can afford to use in connection with your automobile tax.

Mr. VAN TASSLE.— Or it might be put in the abstract?

Mr. RICE.— No, you wouldn't want to put it in the abstract.

Mr. NOSTRAND.— How long can they be amended in that way?

Mr. RICE.— It must be in at the time the tax levy is made out. It could not be done now.

Mr. RICE.— There is one question at this time that I wish to take up and urge upon you, to hurry the agreements along. There are very few in, and it is coming to a point where we must commence to see something coming along. I think it has been talked to you at your meetings this year, but I want to call your attention to this proposition, that I would believe in putting a fair amount in your first item for the general repairs of highways, what is necessary for your sluices, and then confine yourself in the average town to one or two permanent improvements. No agreement will be approved that comes down here this year with ten or a dozen small appropriations for turnpiking or the like of that. That should go into your general repairs of highways. We have had some agreements come in for a hundred dollars for three miles of turnpiking. That should go in your first fund of the agreement.

I wish to urge upon you that when you get home you see that these agreements start to come along to us.

There are a great many towns in the counties that have town macadam roads. I think you should set aside a larger amount for their maintenance. We have had some towns come in, ten dollars

a mile for the maintenance of twenty miles in a certain county, of macadam road. You know that is absurd. I want to urge upon each superintendent that sufficient funds should be set aside for the maintenance of permanent work which has been accomplished in past years, and then go on and build what you can afford to in the way of permanent work. I was talking with Mr. Ball in regard to Jefferson county — that is one of the strong counties on town work, and have a great many miles. This coming year they are going to shut down all construction and devote practically all their time, or enough money, to keep their roads in shape. Is that true, Mr. Ball?

Mr. BALL.— That is what the town board talked. They have been building town roads for seven or eight years, stone roads, and the towns have come to a point where new construction is practically at an end, due to the fact that if a town has 10, 15 or 20 miles, if you distribute \$200 a mile for oiling, as we intend to do, it will practically take all our highway money to maintain what roads we have. They just woke up to that fact last year. I had the good luck to have five towns use some oil on one to three miles of road and I have won them over to the idea of maintenance.

Mr. RICE.— Maintenance.

Mr. HODGMAN.— Where would that item of maintenance go in the agreement?

Mr. RICE.— In your first item.

Mr. NOSTRAND.— I would like to ask a question about mileage. Some of my towns put down \$100, some \$40 or \$50 per mile. One town has 500 miles, and they run about \$40. Now, does that mean — and some claim that it does — that each mile ought to have \$40 spent on it?

Mr. RICE.— No; that is an average amount, and is specified as such on the agreement.

Mr. NOSTRAND.— Some people say they don't get anything and that other people do. They don't understand why, if we say in an agreement there are so many miles of road at \$40 a mile, they don't get \$40 a mile.

Mr. RICE.— It is for the general repair of the highways.

Mr. NOSTRAND.— We say we will spend \$40 a mile; they think they are going to have it.

Mr. RICE.— All right; I am with you; I will be glad to have you get it there.

Mr. RICE.— Is there anything further you wish to take up at this time? If not, I understand Mr. Nostrand has something to take up with the association.

Mr. DAYTON.— Are we going to have a summer meeting?

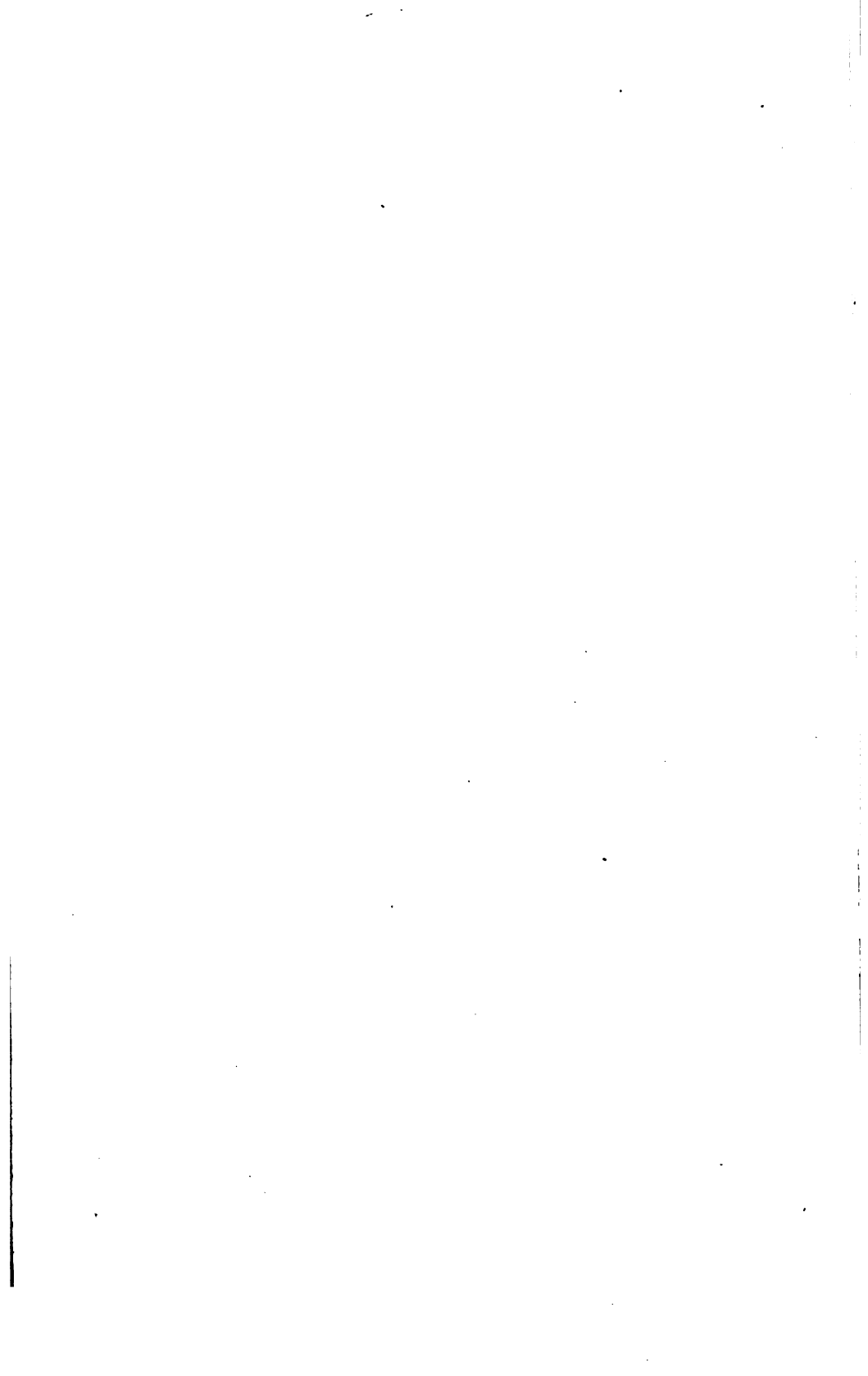
Mr. RICE.— That is a matter we can take up at a later time. Is there anything further? If not, I want to thank you again for the splendid attendance we have here. You may say most all of the boys are here, except a few who are sick. Mr. S. A. Howard has been dangerously ill; Mr. Stone, of Chenango county; Mr. George Powell, of Ontario county; Mr. Roemer, of Rensselaer county; I think Mr. Bashford, of Columbia, and Mr. Frank Bogardus, of Onondaga. Outside of those, I think there are only two or three absentees to-day.

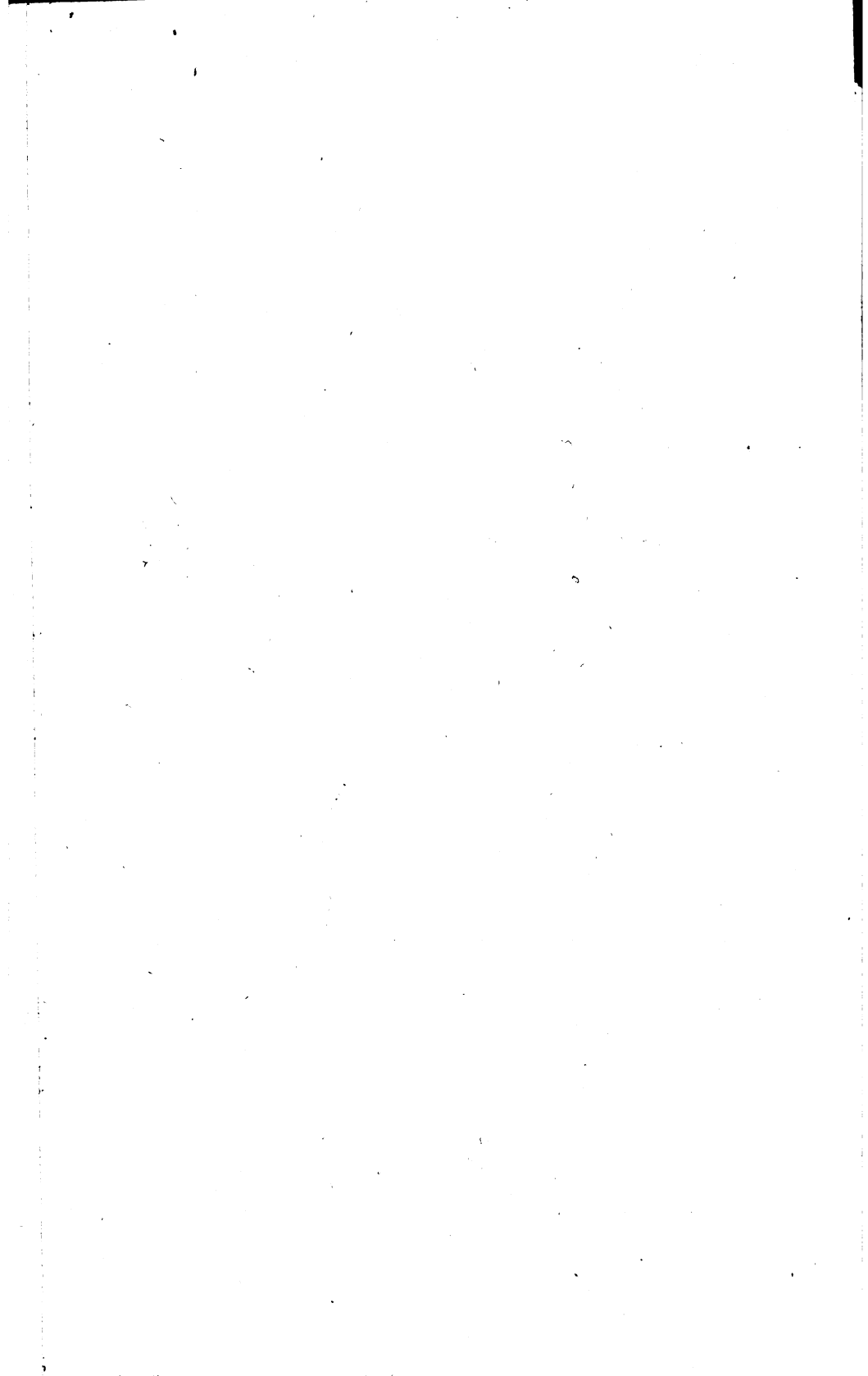
I will now turn the meeting over to the County Superintendents' Association, and I trust that at any time any questions come up you will confer with us, and we will try and help you out.

Meeting adjourned.









This book is under no circumstances to be taken from the Building

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